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Contents

Editorial

The composition of this issue conforms to the policy, announced in our last number, of printing longer studies in the bulletin. Dr. Sarah C. Gudschinsky, the author of the first study, is a member of the staff of the Summer School of Linguistics, Glendale, California. Her article should be read along with her earlier work *Handbook of Literacy*, Glendale, 1953. The reader is referred also to two earlier articles by other members of this organization: 'Using Linguistic Analyses in Literacy Methods in Mexico', by Ethel E. Wallis, and 'The Construction and Use of Readers for Aymara Indians', by Elaine Mielke Townsend, both of which appeared in the October 1952 issue (Vol. IV, No. 4).

Mr. J. C. Mathur, M.A., A.I.C.S., and Mr. C. L. Kapur, M.A., the authors of the second study, are respectively Director-General and Chief Producer, Educational Programmes, All India Radio.

Special features being planned for later numbers include a detailed history of the methods of organization and teaching used in the great literacy drives in the U.S.S.R. (1917-40), and a special number is to be published on the arts in adult education.

We are anxious to have our readers' reactions to this new policy and again invite their comments.

Recent trends in primer construction

Sarah C. Gudschinsky

Introduction

This paper is a report of recent work on primer construction carried out by members of the Summer Institute of Linguistics. It was originally intended to organize this report in terms of how primer methods differ because of linguistic, social or cultural factors. When the data (from 30 languages in six countries) were carefully examined, however, the outstanding fact was not the diversity but the amazing uniformity of methods. Almost without exception the primers in current use are eclectic in nature, even though based on such ostensibly different approaches as a syllable method and the Psychophonemic[1] method.

It is the purpose of this paper to describe some preliminary considerations concerning primer planning (Part I) and the procedures for primer construction which have proved most effective (Part II).[2] Examples of complete primer series in 19 different languages are briefly described in Part III. The most exciting innovation described in this paper is a specific technique for combining the gradual controlled introduction of new elements with the use of natural idiomatic sentences and text. This is described under 'Controlled introduction of elements' in Part II.

Part I

Preliminary considerations

Before actual primer construction can begin, questions of orthography must be settled, some consideration must be given to the audience for

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1. For a detailed discussion of this method see: Elaine M. Townsend, 'Accelerating Literacy by Piecemeal Digestion of the Alphabet', *Language Learning*, Vol. I, July 1948, pp. 9-19; and Guillermo C. Townsend, 'El Método Psicofonémico de Alfabetización Como se Usa en las Escuelas Bilingües del Ministerio de Educación Pública de Perú', in *Estudios Antropológicos Publicados en Homenaje al Doctor Manuel Gamio*, Mexico, 1956, pp. 685-92.
2. Parts I and II are essentially a revision of Part IIB of my *Handbook of Literacy* (second edition, Glendale, 1953). Included here are amplifications and corrections and some ideas which are new since the *Handbook* was last revised.

whom the primer is intended, and a teaching method must be chosen. These things are discussed in the following paragraphs.

In an ideal orthography there is a one to one correspondence between the symbols and the phonemes of the language.[1] (This is what is popularly known as a 'phonetic alphabet' or more correctly a phonemic alphabet.) There is frequently, however, strong pressure from bilinguals or from leaders who speak only the major language[2] to add to the vernacular orthography symbols for allophones which are similar to the phonemes of the major language, or to adopt the orthographical inconsistencies of the major language. The problem is to what extent yielding to the social pressure is pedagogically justified. The answer may differ depending on the aims of the programme. If the aim is only literacy in the vernacular nothing would be gained by making the job harder by adding unnecessary new symbols, since it is well known that in general a phonemic alphabet is the easiest for the monolingual beginner. But what if the reading of the vernacular is to be a bridge to learning the major language? Will conformity to the orthography of the major language make the transition easier?

There is some evidence that the symbolizing of allophones makes the transition to reading materials in the major language harder rather than easier. The native speaker hears allophones of a single phoneme as the same. If they are symbolized with different symbols, he simply equates the different symbols as two ways of writing the same thing. This makes his reading somewhat more difficult, but his writing much more difficult; the rules for the choice of symbols appear to him to be arbitrary and capricious. Later when he learns to read the major language, he is conditioned to regard the symbols as representing a single pronunciation, so that his learning of the contrastive pronunciation is hindered.

If on the other hand the pupil is taught with a phonemic alphabet, he is accustomed to expect each difference in symbol to be correlated with a difference in pronunciation. When he finds new symbols in the major language, he expects to learn new pronunciations for them. Learning the pronunciation contrasts is not easy, since it involves learning a new phonemic system, but at least the learner is not hindered by the bad habit of ignoring distinctions.

1. A phoneme may be very roughly described as a unit of sound which is significant in a language (e.g. the sounds represented by *t* and *p* in the English words *tin* and *pin*). An allophone is a non-significant variant of a phoneme (e.g. the phonetically different values of *t* in the English words *top* and *stop*). These statements are given here for the convenience of the non-linguist. They are in no sense adequate as definitions. The interested reader may refer to Leonard Bloomfield, *Language*, New York, 1933; or Kenneth L. Pike, *Phonemics: A Technique for Reducing Languages to Writing*, Ann Arbor, 1947. In Chapter 16 of *Phonemics*, Pike discusses the relationship of phonemics to orthographies.

2. Throughout this paper the term 'major language' is used to denote a language which has status as an official national language, or as a vehicle for literacy or scientific works. It is roughly a cover term for 'national language', 'official language', 'trade language' and the like, since these are not distinguished in this paper.

The term 'minor language' is used interchangeably with 'vernacular' to denote a relatively small group within a major speech community.

It may sometimes be necessary to adjust the primer to a non-phonemic alphabet, with allophones symbolized, already in use in the vernacular literature. In this case, the progression in the primers may be adjusted to allow for the use of a phonemic alphabet in the first lessons, but with the introduction of the pronunciation and symbolization of the major language later in the primer series before the stage of unrestricted reading is reached. This was done, for example, in the Aymara. The orthography for the Aymara New Testament and other literature has five vowels (*i, e, a, o, u*) as in Spanish. Of these *e* and *o* are positional variants of *i* and *u*. All attempts to teach the monolingual beginners to distinguish between *i* and *e* or *o* and *u* have failed. The primers, therefore, were made using only *i, u* and *a* in the Aymara lessons. The last lesson in the primers introduces the Spanish letters which do not occur in Aymara. These letters—with their pronunciation—are taught in Spanish words. When the pupil has completed his primer and is ready for unrestricted reading in his own language, he has already learned to hear and read the *e* and *o*. Thus he is able to manage the orthography of his own language without serious hindrance to his learning of Spanish.

The evidence for the effects of inconsistent orthography on transition to the major language is not quite clear. In a number of projects, the sound *k* has been written *ca, co, cu, qui, que* following the Spanish usage. There is unanimous agreement that this is harder to teach than *ka, ke, ki, ko, ku*, but there is not unanimous agreement as to how much this orthography helps in the later learning of Spanish. It seems evident that *ca, co, cu, qui* and *que* are read more easily in Spanish if they have already been taught in the vernacular, and this is stated in some of the reports. But no one has studied the effects on the teaching of Spanish *ci, ce* (which are phonetically *si* and *se*). It is not, therefore, possible to say with certainty whether the long-term gains in the major language outweigh the immediate loss in the teaching of the vernacular.

It does seem certain, however, that if any inconsistencies of the major language are to be imposed on the vernacular they should be limited to systematic ones for which rules can be given. Certainly there would be little excuse for following the highly irregular vagaries of say English or French spelling in devising an alphabet for a previously unwritten language.

ORIENTATION

Adults v. *children*

It has usually been considered important to make separate primers for adults and children. I have stated elsewhere that in my opinion this need not always be so.[1] This opinion has been considerably strengthened by reports that primers which are well oriented culturally are actually being used with both adults and children. This is possible because in most of the primitive cultures represented in these reports the children share in many adult activities—and observe and imitate others. There is

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1. Gudschinsky, *Handbook on Literacy*, p. 70.

relatively little subject matter suitable for use in a primer which is either exclusively childish, or specifically forbidden to children.

Illiterates v. semi-literates

The greater problem is the difference in the needs of the completely illiterate and the semi-literate. By semi-literate is meant the person who has learned to read mechanically in a major language, but with little or no comprehension.

The primary aim for both the illiterate and the semi-literate is reading ability in the vernacular for its own sake, and also as a tool for learning to use and read the major language.

The illiterate needs easy lessons with gradual introduction of new elements and slow progression. The semi-literate who feels that he can already 'read' is impatient with such easy material—and perhaps scornful of the use of the vernacular. It is evident that the two groups need somewhat different primers. The material on primer construction in Part II of this paper is geared specifically to the needs of the completely illiterate. It can, however, beadapted for use in a separate primer or primer series for the semi-literate. This is done by starting from what the semi-literate already knows: those letters of the vernacular which have approximately the same pronunciation in the major language. These alone may be used in the first lessons. Then the elements that are peculiar to the vernacular may be introduced gradually by the same techniques which are used in primers for illiterates. Successful primers of this type are described for Chontal and Zapotec.

In some languages the letters which are most productive, and are used in the first primers for illiterates, are all common letters of the major language. In such cases the semi-literate can begin instruction at the point where the first letters unique in the minor language are introduced, skipping the unduly easy beginning material. In such a language a special primer is unnecessary. In a language which does not naturally lend itself to this type of progression, however, it would not be wise to sacrifice good progression in the basic series in order to meet the needs of the semi-literate; it would be better to make the special primer required.

Divergent dialects

In languages without a written tradition, dialect differences may be a special problem in the preparation of primers and reading material. If the dialects are very divergent, it is probably better to make separate sets of primers for the beginners even though the same advanced literature is to be used in both dialects. This avoids initial confusion which may discourage the beginning pupil or delay his learning.

In two cases, however, ways have been found of using a single set of primers for two different dialects. In the Huitoto[1] tribe, the differences between the Muinan dialect and the Murui dialect appear to be largely

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1. A summary of each project may be found listed under the name of the language in Part III.

a matter of the choice of lexical items. A single primer was made for use in both dialects by limiting the primer vocabulary to words that are common to both.

In the Cashibo tribe there are regular sound changes which have occurred in some areas and not in others, with the result that what is *sh* in some words in one area is *y* in another, and what is *ñ* in some words in a different area is *y* in another. In this case the dialect differences were ignored. The works were written with *sh* and *ñ* in the primers used for all the dialects. This means that in the dialects with *y* the pupils have to learn two values for the *sh* and *ñ* symbols, but this is reported to have caused little or no difficulty.

PRIMER METHODS

As has already been stated, the vast majority of the primers in current use in Summer Institute of Linguistics projects are eclectic in nature. This in itself, of course, is not sufficient cause for deciding that the use of bits from several methods is more effective than the consistent use of one approach. It might even be argued that this eclectic trend is a direct result of the advice given in my *Handbook*.[1] This may well be true in such projects as the Aymara and the Mixtec which use avowedly eclectic methods, and even in the case of the projects which use one or another specialized approach but are largely eclectic in practice. There is also, however, a significant group of primers which were modified in the direction of a more eclectic approach as a result of observed inadequacies in the earlier materials.

Examples of primers which are eclectic although based on specific approaches include the following: (a) The syllable approach materials in Apache, Chontal, Huixtec and Otomi, all of which have words and sentences from the very beginning (global method); in all of them the order of introduction of new syllables was chosen for its productiveness (Psychophonemic method). (b) An approach using frame sentences with substitution items reported for Jacaltec (Guatemala, reported by Clarence and Kay Church, but not included in the reports in Part III); the words of the substitution list are used as a starting point for teaching syllables and phonemes. (c) A story method primer in Quiché (Guatemala, reported by Gail Maynard and Grace Kenney of the Instituto Bíblico Quiché in San Cristobal de Totonicapan but not included in the reports in Part III), which uses the sentences of the story as a starting point for teaching the recognition of the word elements.

Examples of primers which have been modified in the direction of a more eclectic method include the following:

1. The Navajo basic primer, which used an almost pure syllable approach. It proved to be too difficult and has been modified by the addition of introductory lessons that present a few syllables at a time in

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1. Gudschinsky, *Handbook on Literacy*, pp. 15, 17: 'Three essentials of reading . . . are the ability to attack new words, fluency, and understanding. . . . These essentials must be included in every system of teaching reading, no matter what approach is used.'

meaningful contexts,[1] and of supplementary practice lessons with much frame drill and stories.

2. A Kekchi primer, built entirely of frame sentences with word substitution—now being revised by the addition of syllable teaching 'in order that the time involved in producing independent readers will be reduced'. (Guatemala, reported by Francis Eachus and Ruth Carlson, but not included in the report in Part III.)

3. The Psychophonemic method, where recent developments are less a matter of drastic change than of a fuller realization of the inherent possibilities of the method. The basic principles of this method are the controlled introduction of the letters of the language roughly in the order of their frequency of occurence in common words, the use of words as the basic unit of instruction, and provision for adequate repetition.[2]

This method has sometimes resulted in primers consisting almost entirely of disconnected words (mostly concrete nouns) without overt syllable or letter drill; sentences usually appeared only late in the primer series. In Peru where the use of the Psychophonemic method is mandatory for primers used in the bilingual schools, under the direction of the Ministry of Public Education, there has been considerable expansion of the method without any change in the basic principles. For example, the Aguaruna, Cocama, Huitoto, Ocaina and Piro primers have sentences from early in the first primer. The Bora, Cashibo, Piro and Shipibo primers have special emphasis on complete sentence sequences or stories early in the series. The Aguarana, Cashibo, Cocama, Piro and Shipibo primers have special devices for teaching syllables. Many of the others provide for syllable teaching with supplementary teaching aids such as flashcards.

The advantages of the Psychophonemic method as outlined by Olive Shell emphasize this eclectic trend: 'There are two extremes in methods of primer making. At the one extreme are methods such as the alphabet, syllable and phonic methods where the components of words, often unmeaningful in themselves, are taught first, and then words are figured out from them. At the other extreme are methods such as the story or sentence methods, where the whole "story" is presented first, and little by little it is broken down into words, and finally perhaps into their component parts. The Psychophonemic method takes one to neither of these extremes. Rather, from its central position it works out both ways, eventually covering the areas of both of the extreme method groups. By working from meaningful word units, by repetition and association it focuses attention on word parts which serve as tools for attacking new words; by presenting words with interesting content and sentences and short stories as soon as possible pupils are provided with interesting thought content from the first.'[3]

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1. A similar revision was made for the Chol primers as described in Gudschinsky, *Handbook on Literacy*, pp. 45-7.
2. These are only the barest highlights of this method; it is fully described in the articles referred to in footnote 1, page 67.
3. Quoted from Olive Shell's report on the Cashibo primers.

In the light of the above evidence, the superiority of an eclectic type of primer seems certain. In the discussion of primer construction in Part II, there is no mention of different approaches, but a single set of procedures is presented. The relative proportions of syllable teaching, meaningful material and drill for fluency will vary depending on the structure of the language and the taste of the author.

Part II

Primer construction

The essential principles of a successful primer, as demonstrated by field testing, are the gradual introduction of new elements (the central principle of the Psychophonemic method), provision for independent reading by the use of syllable or letter drill (the central principle of syllable methods), provision for understanding through the use of meaningful material (the central principle of sentence and story methods) and provision for fluency by the use of adequate repetition.

CONTROLLED INTRODUCTION OF ELEMENTS

The elements to be introduced in any primer include at least the following: (a) All of the phoneme symbols, including those for stress, tone, length, and nasalization as well as the consonants and vowels. (b) The various patterns in which these symbols occur—i.e.e ach symbol should be taught in all of its positions, usually in terms of the syllable. In practice this means the gradual introduction of the different syllable patterns, with special attention to closed syllables (with final consonant), consonant clusters, vowel clusters, and the like. (c) Common function words which should be recognized at sight for fluent reading. This list should include the obligatory morphemes for all sentence types. (d) Special conventions such as punctuation, capital letters, etc.

The list of elements is different in each different language. The first step in primer making is to make such a list, taking great care that nothing is omitted and to check off the items as they are introduced in the primer.

The order in which the elements are introduced in the primer series depends on a balance between their productivity and their difficulty.

Productivity

Productivity is the usefulness of the element in the formation of new words, or sentences, or story sequences. The productivity of an element is usually measured primarily by its frequency in word lists and/or texts. It must be emphasized, however, that the letter counts are a device for determining productivity and *not* an end in themselves. For each primer

series therefore, the decision as to what type of material to use should be made before the letter counts are made.

To date, in the choice of material for controlled introduction of letters, emphasis has been on simple materials. Simple has usually been interpreted to mean easily understood concrete nouns, short words and short sentences. Recent observation seems to indicate that such 'simple' material may actually be difficult in that it is unnatural to the speech habits of the native speaker. It may also be boring because of the repetitious use of a single sentence type. Varied repetition within the limited vocabulary and patterns may lead to the construction of sentences that are offensively contrary to what is permitted in the culture; an early version of the Shipibo primers, for example, included the phrase 'laughing at paternal uncle'—which is simply never done in Shipibo culture.

Natural idiomatic meaningful material is the best content for the primer series. This is not a new idea, of course, and has often been tried in various parts of the world, where folk tales or proverbs have been used for the first lesson in reading. There has been one grave difficulty in the early use of text: uncontrolled text puts too great a strain on the pupil by requiring him to learn a bewildering variety of symbols and patterns all at once. The question is, can the value of natural materials and the value of controlled introduction of elements both be retained?

The use of natural sentences and text is not inconsistent with the controlled introduction of elements if the whole idea of what constitutes productivity of the controlled elements is revised.[1] From the new point of view, an element—letter, tone mark, syllable pattern—is productive to the extent that it can be used to construct natural idiomatic sentences and sentence sequences. The search for this kind of productivity requires a new type of counting based on a careful syntactic and morphological analysis so that the obligatory and permitted parts of each sentence type and word class are known

The first step is to ascertain the frequency and order of occurence of sentence types in free text. Other things being equal, frequent sentence types should be used most frequently in the primer, and probably introduced first.

The second step is to list the obligatory parts of each sentence type. These may be special particles that indicate statement or question, the tense or person markers required by the verb, or the like.

The third step is to list the letter and syllable types which occur in each set of obligatory parts. These define the basic minimum that must be introduced in order to use each sentence type.

The fourth step is a letter frequency count of content words (nouns, verbs, adjectives) which are semantically suitable for use in the primers. In making a frequency count of letters it is exceedingly important to notice that what is wanted is not the absolute frequency (i.e. the exact number of times the letter occurs), but the number of different words in which each letter occurs. For example, suppose the word list includes words of the shapes *titutatu, piru, pasi, purasu, sari*. The list of consonants

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1. The basic ideas for this section came from the report on the Shipibo primers, written by James Lauriault.

in an absolute count is t-4, p-3, r-3 and s-3. This implies that t is the most productive consonant. A glance at the words, howev, shows this to be false: t is a component in only *one* word, while p, r, and s each occur in three words. The corrected word count would be p-3, r-3, s-3 and t-1. This indicates that in this small sample p, r and s are equally productive, but that t is far less productive.

The first choice of material for the primer is a combination of the elements most productive of sentence types and the elements most productive of lexical content.

The two counts can be combined by first writing the phonemes occuring in the obligatory morphemes of each different sentence type at the head of separate different columns; and then listing in each column all the words which can be made from those phonemes and no others. A glance at these lists will show their relative usefulness immediately. Experiment with different lists will indicate the most useful group for the first lesson, and a productive order for the introducing of other elements in the later lessons.

It may be that some of the most important function words have syllable patterns or assortments of letters such that there are few if any useful content words that use the same letters or patterns. In this case these items may be introduced as sight words,[1] instead of being used as basic in the count.

In the final decisions as to the order in which elements are to be introduced, productivity must be balanced against difficulty.

Difficulty

I had long supposed that the greatest difficulties were digraphs or letters with diacritics, and that these things were difficult in and of themselves. This has proved not to be the case. The true difficulty appears to be confusion arising from sources of three kinds: the introduction in a single lesson of elements so similar that the pupil is unable to distinguish them; the development of habits of response that must be unlearned at a later stage; the introduction of so many new elements at one time that the pupil confuses them.

It is essential that the first words, letters, and syllables introduced should contrast sharply in form. In one set of lessons, the use of *na* and *ña* as the initial contrast appears to have permanently discouraged some of the pupils who were unable to distinguish them. The first primer in Jacaltec (Guatemala, Clarence and Kay Church) was completely revised because pupils were unable to distinguish *mam* 'father', *sam* 'clay griddle', and '*nam*'. One of the reasons for drastic revision of the Piro primer series was the difficulty in distinguishing *giga* and *gwa* which were introduced on the first page—some pupils are reported to have been unable to distinguish these words even after having been taught over a period of a year.

The similarities to be avoided include letters of generally similar form as *o* and *e*, *m* and *n;* letters or words which are mirror images of

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1. Gudschinsky, *Handbook on Literacy*, p. 19.

each other as *b* and *d, rat* and *tar;* letters which differ only by a diacritic as *e* and *ë,* and words which differ only by a single letter as *sam* and *nam.* This principle applies primarily to items which are both new at the same time. Once a fourth to a third of the letters are *thoroughly* learned, it is good pedagogy to use minimal difference for distinguishing the new ones. For example: if *k* is well learned and recognized at sight in all combinations, then *k'* and *k* can be contracted without harm in words which are minimal or near minimal pairs.

Patterns which are contrary to what the pupil has been conditioned to expect cause difficulty in the later lessons. There is evidence that restriction to CV (consonant-vowel) syllable pattern in a first primer makes it difficult for the pupil to learn a CVC (consonant-vowel-consonant) pattern in the second primer, after his uniform reading of CV is well established. This was observed specifically in the Chol (Mexico) primers, in which CVC was introduced only after all the CV syllables of the language had been taught. The majority of the pupils appeared to have developed a block against a change in syllable pattern, and had tremendous difficulty in learning the CVC syllables. In Huixtec, a related language of the same family, closed syllables are introduced early in the first primer and they are learned at that point without serious difficulty.

An early version of the Shipibo primers used only two-syllable words in the first books of the series, and pupils experienced severe difficulty in reading longer words later. The present series uses words of various lengths from the beginning without appreciable difficulty. The present Shipibo series also introduces nasalized vowels, the digraph *ou,* a vowel with diacritic *ë* and vowel clusters with *i* and *a* early in the series, because these all occur in the morphemes which are obligatory for good sentence structure. They do not seem to present any special difficulties in teaching. Similarly, the Navajo lessons successfully use tone and length marks in the teaching from the very beginning.

Apparently the advice to reserve 'difficulties' to the end of the series[1] is very poor advice indeed. It is now evident that a wide variety of letters and syllable patterns should be introduced early.

With the suggestion that a wide range of elements be introduced in the early lessons, a word of caution is in order: any overload of material to be memorized causes difficulty. The elements in the first lesson section should not be more than five, or six at the most. Usually these should be first presented in the form of not more than two or three words whose total pattern contrasts sharply, and which can be learned first as wholes. After the initial lessons, letters may be added one at a time. However, if care is taken to insure good contrast, two or even three new elements may be introduced at once. This requires that they be thoroughly drilled before anything is added. Never should two or more confusingly similar elements be introduced for the first time in the same lesson.

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1. cf. Gudschinsky, *Handbook on Literacy,* p. 21. The early introduction of various patterns is implicit in a number of the reports, but is specifically mentioned only by James Lauriault in his report on the Shipibo primers.

Once the order in which elements are to be introduced is determined and the content material has been prepared, the appropriate techniques for teaching independence, understanding and fluency must be chosen. The following paragraphs give some suggestions that have proved especially useful.

Provision for understanding

The primary purpose in reading is, obviously, the understanding of what is read. To teach the pupil to read with understanding it is necessary to provide meaningful material, and to test his comprehension of what he reads. Recent field reports put increasing emphasis on the importance of linguistic and cultural naturalness in the reading material. The exclusive use of materials by authors who are native speakers of the vernacular would be ideal. This is often impossible in minority languages recently reduced to writing, where there are no individuals sufficiently literate to be ready to write books. There are, however, several ways in which the non-native speaker (trained in linguistics and pedagogically oriented) can provide materials that approximate to those written by native authors. This is easiest at the level of the advanced lessons, when strict control of the phonemes and syllables used is no longer necessary. For these lessons traditional oral literature may be committed to writing. The easiest technique is to record the story-teller's voice and transcribe the record. The story-teller listening to himself may suggest improvements or embellishments. Some editing of the story may be necessary in the switch from speaking to writing, but great pains should be taken to keep the finished story as natural as possible.

Similarly, anecdotes, observations about nature and the like may be recorded. One especially popular story in Mazatec (Mexico) consists of the conversation required for finding a place to sleep and eat in a strange town. It was taken as text from a native speaker of Mazatec, and then printed in diglot with Spanish. It is the Spanish that makes the book popular but those who read it in order to learn some new Spanish phrases are also practising their reading, and are learning to read for information.

Informative material on history, geography, and the like can be translated from another language. In such cases great care should be taken to ensure that the resulting text is accurate and clear in the target language—without evident marks of its source. One technique for this is to translate without the use of the source language, i.e. the linguist-translator explains to a native speaker in his own language what each paragraph of the text says. He asks the native to re-explain it and records the answer. Where the answer is insufficient or unclear, the translator explains again more fully, and again records the retelling. From the records he edits a complete text.

Natural text can be used early in the primer series if the primer is deliberately built around it. In building a primer around a text the elements to be introduced are chosen in terms of their productivity within the text.

It is possible to elicit text with a limited vocabulary or a specific content. Text built around specific words (the vocabulary available at a certain stage in the primer) may be elicited by asking the informant questions involving the words wanted and recording the answers: e.g. 'What is a tapir like?' 'What does a child do when he plays?' etc. The answers will need editing to fit the need of the primer exactly but they will have the desired naturalness.

Another way of generating text with specific content is the use of pictures. For this purpose a picture, or a series of pictures which tell the story are prepared. (In many cultures stick figures can be used.) The linguist gives a few words of explanation in the vernacular to the informant and records the story as it is told to him. This may require questions along with the picture from time to time.

Up to this point we have assumed that connected story material is desirable in the primer. In the Spanish project, however, unrelated sentences were used throughout the series except for three pages of content material. This was done in order to increase the semantic range of the words that could be used—and therefore the number of different contexts in which phonemes and syllables could be drilled. A similar plan proved unsuccessful in the Zapotec, however. The report on that language states: 'The previous primer just used isolated sentences instead of a story on each page. This proved confusing to the student who evidently expected continuity.' No definitive statement as to the usefulness of disconnected sentences is possible from this evidence.

The two most widely used devices for checking on the pupil's understanding are questions—requiring either oral or written answers—and matching exercises. The matching exercises can test the understanding of either single words or entire sentences. A high level check on pupil understanding is provided in the Peruvian bilingual schools by the arithmetic problems in the vernacular which are used in the arithmetic classes.

Provision for fluency

Good reading requires fluency. There appear to be two major elements in the teaching of fluency: repetitive practice in reading entire phrases smoothly, and instant sight recognition of the most frequent words.

Repetitive practice is especially encouraged in the preparation of Psychophonemic materials; it is recommended that a great deal of practice be provided with the first half or less of the alphabet before more letters are introduced. This promotes fluency, especially if the practice material is largely phrases or entire sentences. Good examples of this technique are the Cashibo primers, in which Primers 2, 5 and 6 are all review, and the Piro primers which do not introduce any new letters in Primers 2, 3 or 4.

For a good example of the use of frame drill for practice, see the Navajo primers.

The new emphasis on the function words (usually the most frequent elements in running text) has already been discussed. It is worth repeating here, however, that the early teaching of function words (and also

such function morphemes as verb affixes and the like) and their over-learning through drill and practice contribute materially to fluent reading. Specific examples of this in practice are found in the Piro primers in which a noun pluralizer and a verb temporal affix are presented in Primer 1, and person markers in Primer 2. The second Comanche primer consists largely of story materials designed to teach the most common morphemes of CVC syllable patterns. In the Aymara primer, *w*, the phoneme fourteenth in frequency, is taught first in order to make possible the immediate use of an obligatory sentence affix- *wa*, without which sentences cannot be made.

Provision for independence

For independent reading it is essential to recognize parts of words as they recur in new words. Probably the most convenient of the recurring partials is the syllable. For this reason, most primer series need some syllable teaching. A number of devices for this purpose have proved highly effective.

There is almost complete consensus that any syllable should be introduced for the first time in a pictured key-word. A word of warning from the Navajo is that the key-word to be effective must be non-ambiguously illustrated, and the crucial syllable should be both initial and stressed. After several sets of syllables (e.g. all of the vowels with one consonant) have been taught, it may be possible to introduce only one member of the next set with a picture—the others may be constructed by analogy. The Piro primers make use of some non-pictured key-words as well.

A device for calling attention to the like parts in various words is the listing of these words so that the identical syllables are directly underneath each other. Further attention may be called to the likeness by using a bold-face type for the crucial syllable in each word, e.g.

<div align="center">

.ta**pi**ti
piru
saru**pi**

</div>

Practice in noticing the syllables in words is afforded by exercises in finding a given syllable wherever it occurs on a certain page of the primer.

Syllables may be specifically used in introducing new words, by the use of build-ups. The build-up is a list of words already introduced in the primer, from whose parts the new word may be constructed: e.g.

<div align="center">

*sal*to
me*sa*
salsa

</div>

Syllable charts are widely used to show the relation of the syllables to each other, e.g.

<div align="center">

a	*e*	*i*
ta	*te*	*ti*
pa	*pe*	*pi*

</div>

Syllable patterns other than CV seem to give varying degrees of difficulty in teaching. It has already been mentioned that a part of the difficulty may be the prolonged teaching of uniform CV pattern which builds up a habit of expecting that pattern, and actually renders the later teaching of other patterns more difficult. The Shipibo, Apache, Navajo, Huixtec, Piro and Spanish all introduce a variety of syllable patterns early, with good results.

Specific methods for teaching syllable final consonants include the following:

In Huixtec, the closed syllables are each introduced with a pictured word, just as the open syllables are. This is an especially useful technique in Huixtec which has a large number of CVC words.

In Aymara, an unsuccessful attempt was made to teach the closed syllables by use of contracted CVCV nouns, since these lose the final vowel in certain syntactic positions. This proved impractical, however, as the pupils in their slow reading-style pronunciation did not elide the vowels as they would have in normal rapid speech, and they were confused by the lack of a vowel in the orthography. In the revision of these lessons, closed syllables are taught specifically only in the words in which they always occur, and they are not drilled as such.

In Navajo, the closed syllables are taught by adding a consonant to each of the open syllables in turn. These are drilled by placing a letter card against the vowel chart in the appropriate places, and requiring the pupils to read the new syllable thus formed.

Syllables of CCV pattern are also sometimes a trouble spot. These have been successfully taught in Piro by the use of the preposed person markers. Verb stems with initial consonant are taught in the usual picture-word manner. Then paradigmatic sentence sequences are given, in which consonant prefixes mark the person of the verbs—and provide drill in reading the consonant clusters.

There is some difference of opinion as to the value of including non-meaningful syllable drill in the primers themselves compared with the use of supplementary teaching aids. The workers who include the drill in the primer do so in order to reduce the amount of supplementary material needed for effective teaching, and to make it possible for one new literate to teach another, using only the primer. Those who have eliminated all non-meaningful drill have done so either to reduce the size and cost of the books, or in order to encourage the pupil to read for meaning—he is taught to expect that everything in his primer will make sense if he reads it right. To date there is no definitive evidence that either choice is distinctly better than the other. The following paragraph from the instruction book for the Peruvian bilingual schools probably represents a reasonable middle ground: '. . . if isolated syllables are included, they must be enclosed in rectangles, squares, etc., to isolate them from the reading text; they must occupy only a very small portion of the book as a whole; they must be presented as parts of words first learned as a whole—then, of course, they may be used as a basis for attacking new words. Attention can be focused on certain syllables by darkening them within the word'.

The use of *pictures*, especially as illustrations of key-words, is almost unanimously accepted. Field reports indicate, however, that a few cautions are in order. Careful experiments made in the construction of the Shipibo primers indicate that to be effective the illustration of a key-word must be unambiguous. This can be tested by showing the pictures to unsophisticated monolinguals and asking 'What is it?' (for nouns), 'What is he doing?' (for verbs), or 'Where is it?' (for locational words). Good pictures will elicit an almost perfectly uniform response. Unambiguous pictures must fit the culture; they should be sketched from life or from photographs. They must be clear. For the Shipibos, line drawings proved to be best—elaborate shading confused the less sophisticated pupils.

The number of pictures used should be governed by their function in the teaching. Usually this is either to permit the pupil to recognize the meaning of a word or to help him to remember the word by giving it a vivid association. In stories with controlled vocabulary, the pictures sometimes supply additional information beyond that permitted by the limited vocabulary. Pictures that are purely decorative and add nothing to the instruction can safely be omitted entirely. Some of the primers (e.g. the later volumes of the Piro series) have no pictures at all, but apparently are adequate without them.

There are varying opinions about *type size*. In general the Peruvian materials are made with a succession of type sizes. In the first primer 3/8" letters are used, 1/4" in the intermediate primers, and finally 3/16" letters in the last part of the series. Transition from hand-drawn letters to typewritten ones is made by using both—with the same material—on the same page.

Other successful primers have used only the 3/16" type throughout. Still others have a change from 18 point type to 14 point in the middle of the series. The Huixtec primers were specifically planned to avoid a transition from the hand-printed style to typewritten style because such transition had proved to be difficult for the pupils in other languages of the same language family.

There is also a difference of opinion as to the use of *capital letters and punctuation marks* in the primers. The Spanish materials omit all punctuation, and use capital letters only for proper names. (The authors report that if they were making these primers again, they would omit all capitals as too confusing.) In the Mazatec primers, periods are used and taught from the beginning, but no capital letters are used in the series at all. In the Huixtec materials, periods are used from the beginning; capitals are used only for proper names in the first part of the first primer, but by the end of Primer 1, capitals are used for beginning sentences as well.

Part III

Examples of primers

This part of the article presents in brief summary form the essential facts concerning the literacy projects on which Parts I and II above are based. These projects are only a highlighted sample of more than 150 such literacy projects in progress under the auspices of the Summer Institute of Linguistics. All are alike in that, except for the Spanish primer in Peru, they are for minor languages, none of which is now or is likely to become of any major importance as a vehicle of advanced education, or of great literature. The primary objectives of these projects are twofold: to enable people to use the vernacular as a bridge to the easier learning and understanding of the appropriate major language (Spanish or English), and to make available to people whatever may be published in the language they understand best. The projects are of two sharply differing types: those that are a part of a large government project, and the small, highly experimental efforts of individual linguistic teams.

The materials from Peru are of the former type. In 1951 the Ministry of Public Education initiated a programme specifically adapted for the jungle Indians. Its aims are to introduce the Indian to modern civilization and to help him take his place in the national culture. This requires a speaking knowledge of Spanish and effective literacy. These ends are met by the following programme, carried out in bilingual schools established in the various jungle tribes:
1. Three years of 'transition' or preparatory work. For these three years reading, writing and arithmetic are taught from carefully graded textbooks in the local vernacular. There are oral classes in Spanish.
2. Three years of 'primary' education. In practice, the first year is usually covered in two. For these years, reading, writing, and arithmetic are taught in both the vernacular and Spanish. The diglot textbook *Naturaleza y Vida Social* is used as a reading text in the vernacular and as the basis for instruction in spoken Spanish classes.

To provide bilingual teachers for the schools, the Curso de Capacitación para Nativos Alfabetizados de la Selva Peruana was set up in 1951 by Supreme Decree No. 909. This course provides instruction for the teachers for three months a year for five years. The rest of the year is spent in teaching. Special classes in Spanish and reading are provided for prospective teachers who are not yet sufficiently bilingual or literate to begin the teacher's course.

The Summer Institute of Linguistics has been privileged to provide technical assistance in the analysis of the languages, the elaboration of the primers, the translation of the Spanish texts, and the vernacular part of the teacher training.

In the year 1957 (the most recent for which exact figures are available) the course, under the direction of Dr. Efraín Moroto Best, Catedrático of the National University of Cuzco, appointed by the Ministry of Public Education, had 40 teachers in attendance besides 11 new prospective

teachers. That year there were more than 1,000 pupils in 40 schools in 9 tribes.

In these schools, the bulk of the regular pupils are children or adolescents. But many of the teachers have organized evening classes for the adults, using the same material.

The aspect of the work of interest here is the actual construction of the primers and their use. Because all of the teachers are trained in a single class, it is important that the materials they are to use should be more or less uniform. For this purpose, the Psychophonemic method was chosen for use in all the primers. Within the basic framework of this method, there is considerable variation in the primers in the various tribes, due in part to language differences and in part to the different points of view of the linguistic technicians.

The projects reported here from Mexico, Bolivia, Guatemala and the United States are individual projects initiated and carried out primarily by the technicians named as authors of the primers, except in so far as some of them have a wider use among mission groups or others. These small projects are an important proving ground for new materials and methods, because of the wide variety of the cultural, social and linguistic factors which influence them, their flexibility and the ease with which they can be revised or modified.

AGUARUNA (PERU)

(Mildred Larson and Jeanne Grover, linguists.)

There are approximately 10,000 speakers of Aguaruna. They were nearly 99 per cent monolingual and illiterate before the bilingual school programme began.

The Aguaruna primers are a part of the Peruvian Ministry of Education's programme for the jungle Indians. They are being used in 19 bilingual schools with a total enrolment of more than 600.

There is a series of six primers of 40 to 50 pages each, based on the Psychophonemic approach. Primers 1-3 present all of the letters of the language. These are re-taught in Primer 4. Primers 5 and 6 are review story books.

The format for Primers 1-3 is uniform. New words are introduced with pictures. They are repeated, along with review words, in word lists and in sentences—except that the first few pages have no sentences as the vocabulary is still too limited to permit them. Review pages list the words in such a way that the identical syllables are directly under each other and are in bold-face type to emphasize their similarity.

The format of Primer 4 is quite different. Each page of new material includes: an illustrated word which begins with the consonant taught on that page; a box with the syllables which are formed by adding each of the vowels to the new consonant; lists of words using the new syllables in combination with the other syllables already taught in this book; and a sequence of three or four sentences using this same material. Review pages present lists of words arranged with the like syllables directly under each other and story sequences or numbered unrelated sentences. The last pages of Primer 4 teach the alphabet in order. This is especially

Púmpuk

Amésh wáinkamum púmpuk?

¿Wajúkuwame iyashísh púmpuk?

¿Kuntínkaih? ¡Atsáa! ¿Chigkíkaih?

¿Aush yutáigkaih? ¡Ujatkáta

pumpúkush wajúknuita!

Púmpukuk makíchik píshak

muúntai. Wáinchataiyai tsawái

La Lechuza

¿Conoces la lechusa? ¿Como es el cuerpo de la lechusa? ¿Es animal? ¡No! ¿Es ave? ¿Es nuestra comida? ¡Dígame!, ¿como es la lechusa?

La lechusa es un pájaro grande. No se ve

---

important because an Aguaruna-Spanish dictionary makes it possible for the pupils to look up the meanings of Spanish words that they meet in the Spanish reading classes.

APACHE (UNITED STATES OF AMERICA)

(Faye Edgerton and Faith Hill, linguists.)

There are about 8,000 Apaches. They are largely bilingual, but Apache is the first language and the language of the home. Most of them have had some schooling.

The primers are so far only in trial edition and used exclusively by the authors.

There is a series of three primers of eight pages each, with more in preparation. They are based on a syllable method, but also use sentence sequences from the very beginning. Book 1 introduces all of the vowels with four consonants. Book 2 introduces two consonants, and Book 3 introduces three consonants. Length, tone and nasalization are marked from the beginning.

The format is uniform throughout. Each section begins with the new syllables followed by a list of words, and then by sentence sequences which are limited to the syllables being taught plus the review syllables already introduced previously.

Among the words made up of the most frequent letters are the verb 'to go or come', three relationship terms, the words for 'where to', 'where

from', 'no', 'not' and the question marker. This made possible a variety of idiomatic sentences right from the beginning.

AYMARA (BOLIVIA)

(Alan and Iris Wares, linguists. The Aymara dictionary and grammar prepared by Ellen Ross of the American Bible Society were extensively used; Betsy Wrisley, Ada Snider, and Mary Grantham assisted in early versions of the primer, and in teaching the classes in which it was tested.)

There are at least 1 million speakers of Aymara in Bolivia, and perhaps as many more in Peru. Those living on the altiplano and on the islands of Lake Titicaca are largely monolingual and illiterate.

The primers are planned for use under the direction of the Christian Literacy Union. Early testing of the materials was done in co-operation with the work of the Oregon Friends Mission and the Methodist Mission. The Servicio Co-operativo Interamericano de Educación and the Point Four Audio-Visual Center have provided facilities for the printing of the early editions.

The primer series, originally planned for four smaller booklets, is being revised as a single 150-page volume. The method used is frankly eclectic—beginning with a word approach, but proceeding immediately to both the analysis of the words in terms of syllables, and the building of sentences and stories. The primer was designed specifically for young adults, but with little modification is also suitable for children.

The book is divided into six sections of four four-page lessons plus a review in each section. The first section introduces the three vowels and eight of the consonants in CV patterns. The second section introduces four consonants and the use of s and m in syllable final position. (This is the first introduction of CVC syllables.) The third section introduces four more consonants, the long vowels, and the use of p in syllable final position. The fourth and fifth sections introduce the other closed syllables, diphthongs, aspirated stops, glottalized stops, stress, geminate consonant clusters and the longer clusters not previously taught. The sixth section introduces the letters which are used in Spanish and in Spanish loans but do not occur in native Aymara words.

The format of each section is roughly uniform. The new letter or pattern is introduced with pictured words. These words are repeated or drilled in word lists. The syllables formed by the new consonants are drilled in syllable charts and word breakdowns such as:

> *isiwa* 'it is clothes'
> *isi*
> *i*

New words that can be made from the syllables available now (the new syllables plus those previously introduced) are listed. Then the words are used in a story sequence.

Each section is followed by a review section with syllable drill, word drill, and a story.

CASHIBO (PERU)

(Olive Shell, linguist.)

There are less than 1,000 Cashibos. Apart from those reached by the bilingual school programme, they are largely monolingual and illiterate, although some of the men and very few of the women can get along in Spanish; most of the young men know a little Spanish.

The Cashibo primers are used in three bilingual schools established by the Peruvian Ministry of Education.

There is a series of six primers of 34-48 pages each, based on the Psycho-phonemic method. The letters are all introduced in Primers 1, 3 and 4. Primers 2, 5 and 6 are used for review and drill. Primer 1 introduces eleven letters, Primer 3 introduces four and Primer 4 introduces six.

Primer 1 introduces new letters by means of pictured words. These words, and review words are repeated in lists, and—beginning on page 17—phrases and sentences.

In Primer 2, new words using the same syllables already introduced in Primer 1 are introduced by 'build-ups', i.e. review words containing the syllables used in the new word are listed above the new word. The new word can then be sounded out by finding its syllables in the familiar review words as:

> bari 'sun'
> cari 'sweet potato'
> *baca* 'river'

The repetition is in sentences and story sequences.

Primers 3, 4 and 5 combine the formats of Primers 1 and 2. New syllables are introduced by means of pictured words; new words using syllables already introduced are taught by means of build-ups; all repetition is in story form.

This primer series is a revision; it differs from the original version in three significant ways: First, the progression has been slowed down, so that there is considerable practice in reading with one half of the alphabet before the rest of the letters are introduced. The 11 letters taught in the first third of Primer 1 are reviewed throughout Primer 1 and the whole of Primer 2 before more new material is taught in Primer 3. Secondly, the words are more carefully chosen in terms of meaningful content, so that more story material can be introduced sooner. Care is also taken to choose the story material from the immediate culture, and the stories of the later primers are text dictated by native speakers. Thirdly, there is extensive use of build-ups as a device for teaching syllables (in the earlier version of the primers syllables were not taught as such).

Primers 1 and 2 may be revised again soon for the purpose of adding more story material and a wider vocabulary, which is possible with the syllables already being used.

CHONTAL OF TABASCO (MEXICO)

(Lu Reber, Mary Walker, and Kathryn Keller, linguists. Reported by Mary Walker.)

There are between 16,000 and 20,000 Chontals. The degree of monolingualism varies widely from coast villages where a large part of the population uses Spanish for business purposes but Chontal in the homes, to more isolated inland villages which are largely monolingual.

There are at present two primers. One is a transition primer designed for those who are literate or semi-literate in Spanish; it teaches the Chontal symbols that are different in shape and/or pronunciation from the Spanish symbols. The other is the first of a planned series of three for use with monolingual illiterates. These have so far been used in small classes taught by the authors of the primers.

The primer for monolinguals introduces all six vowels, nine of the consonants, and the syllable patterns CV and V. It is based on a syllable method, and is a revision of an earlier primer series based on the Psychophonemic method. The major differences between the earlier version and the revision are: increased emphasis on the syllables and on sounding out new words; the limitation of syllable patterns which makes the material easier; and the introduction of three consonants at a time in each section, rather than only one—this permits the use of a large vocabulary and more meaningful story material.

The primer for semi-literates introduces all the symbols of Chontal which differ in shape or pronunciation from those of Spanish. Each of the 10 lessons includes a long story with five questions at the end for the purpose of making certain that the pupil is reading with understanding. The first lesson uses only Spanish phonemes. Each following lesson introduces one new consonant. At the beginning of each lesson, before the story, there is a list of words using the letter being introduced.

COCAMA (PERU)

(Norma Faust, linguist.)

There are about 10,000 speakers of Cocama. Monolingualism varies from 60 per cent among the older members of the tribe to a relatively small percentage among the younger ones. Literacy, outside the bilingual schools, is limited to a few young people who have learned to read a little Spanish.

The Cocama primers are being used in one bilingual school established by the Peruvian Ministry of Education three years ago.

There is a series of eight primers based on the Psychophonemic method. Primers 1, 2, 3, 4 and 5 are 'basic' primers, and 1a, 2a and 3a are supplementary. The primers range in size from 30 to 40 pages. The introduction of letters is spread through the basic primers: 12 in Primer 1, 4 in Primer 2, 1 in Primer 3, 6 in Primer 4 and 3 in Primer 5. The supplementary primers introduce new words but no new letters.

Throughout the basic series letters are introduced for the first time by means of pictured words. After the middle of the first primer the repetition is increasingly in phrases, sentences, and sentence sequences. The first primer ends with an exercise in matching words and pictures.

The supplementary primers include syllable drill and frame practice. The syllable drill is of two kinds: words are listed with identical syllables

in a single column; pupils are instructed to find certain syllables as in the following (Primer 1a, p. 15):

Macatipa *ru*	meru	rucu	urucuru	cururu
Where is ru?	fly	a fruit	basket	toad

For further practice, the old syllables are re-combined into new words which are used in stories.

Some syllable drill of the same types is included in basic Primers 4 and 5.

COMANCHE (UNITED STATES OF AMERICA)

(Elliott and Viola Canonge, linguists.)

There are about 3,000 Comanches. There are only about 100 elderly monolinguals. Illiteracy is about 10 to 20 per cent.

There are two primers used largely by their authors in individual contacts and small classes. Their purpose is to make Comanche materials available to those whose favoured or only language is Comanche.

The first primer uses a word approach. All of the letters except one are introduced by means of words which are used immediately in sentences. There are also two syllable charts that are used for syllable drill. The prevailing syllable pattern in this primer is CV.

The second primer teaches the less common syllable patterns. In preparation for making this primer, a count of syllables was made in unrestricted material. The count showed that only a relatively small number of the possible closed syllables actually occur, and that these few syllables occur in a small number of words; but that these words are exceedingly common. It seemed, therefore, more efficient to teach these common words as such, rather than to teach the syllable patterns as such. The second primer, therefore, contains a number of stories with much repetition of the crucial words in many different contexts. This should ensure that instead of being sounded out painfully at each occurence they will be read fluently at sight.

HUIXTEC (MEXICO)

(Marion Cowan, linguist.)

There are approximately 5,000 Huixtecs who are about 95 per cent monolingual, and completely illiterate except for those who have learned to read from the materials described here.

The first primer of the series was printed by the Instituto Nacional Indigenista of Mexico. So far the primers have been used in small pilot classes.

There is a series of three primers using a syllable approach since there are many monosyllabic words in the language. Primer 1 introduces the five vowels and six of the consonants in all of the possible syllable patterns (V, CV, CVC, VC). Primer 2 introduces an additional nine consonants and Primer 3 the other eight.

The vowels are presented as the initial syllable of picturable words. Each new consonant is introduced with a picturable word. Each letter is

taught in a four page section: syllable initial, then syllable final. Illustrated words are also used to introduce the CVC pattern which is often difficult to teach. It is introduced early precisely because it is difficult and the early introduction permits extra practice with it.

Most Huixtec consonant clusters occur as word initial, and most begin with *j*, *s*, *x*, or *ch* (as these are the person markers prefixed to verbs). Each type of cluster is introduced in the same section in which its initial letter is taught.

After the first pages, which emphasize sharply contrasting consonants such as *t* and *n*, some very similar sounds are introduced by direct contrast, as for example *ch* and *ch'* (*ch* with glottal release).

Extra space was alloted to *c*, *c'*, *qu*, and *q'u* which had already proved to be the most difficult elements in the language, since these four letters actually represent only two phonemes, *k* and *k'*. They are written with the *c*, *qu* orthography to conform to Spanish usage, in the hope that the loss in efficiency in teaching them in Huixtec might be offset by gains in the transition to Spanish.

Beginning with the fourth page of Primer 1, repetition is in sentences and sentence sequences. Drill on the syllables as syllables is included, but always enclosed in a box to avoid confusion with meaningful material.

MIXTEC OF JICALTEPEC (LOWLAND) (MEXICO)

(Henry and Barbara Bradley, linguists.)

This is a small dialect in a large tribe; the exact boundaries of the dialect are unknown. The Bradleys work in a village of about 150 men with their families. This village is almost totally monolingual: perhaps a third of the men have a mechanical reading knowledge of Spanish, but with little or no comprehension.

The primers are newly completed and have not yet been used extensively in large classes.

There is a series of seven primers of 16 pages each, with two more in preparation. They are based on an eclectic word method: the new material is introduced with words correlated with pictures. The words are immediately analysed into syllables and built into story sequences. The first primer is a vowel book. The consonants are introduced in the other six primers. Primer 1 teaches the four most frequent consonants and the *r* which is not found in many morphemes, but is needed for the pronouns which are essential to good sentences. Primers 2 and 3 introduce two new consonants each, and Primers 4, 5 and 6 introduce three new consonants each.

The syllable patterns are also introduced in controlled fashion. CV and CVV are introduced in Primer 1; CVV with like vowels in Primer 2; nasalized vowels and CVV with unlike vowels are introduced in Primer 3; CV CV and CVV CV are introduced in Primer 4; and VCV, V and V CV introduced in Primer 5.

NAVAJO (UNITED STATES OF AMERICA)

(Faye Edgerton, Faith Hill, Anita Wenker, and Helen and Turner Blount, linguists. Reported by Faith Hill and Anita Wenker.)

There are more than 83,000 Navajos. About 65 per cent of the adults are illiterate, but 91 per cent of the children between 6 and 18 are now in school. There is a high percentage of bilingualism, but Navajo remains the first language and the home language.

The present series of six primers is being used by the various missionaries to the Navajo, and also by some Navajo teachers teaching their own people. These primers replace three primers, now out of print, produced by the government Indian Service for use in government schools. At least 600 readers have been taught from one or other of these series.

The main primer of the series was originally prepared to be used with phonograph records for self teaching. It proved to be too difficult without some supplementary material. There are now three leaflets of eight pages each to precede the basic book (of 24 pages). There are also two practice books, one of 10 pages and one of 14, to be used concurrently with the basic book.

The basic book is similar in style to some of Laubach's materials. The four vowels are introduced first with words whose pictured shape suggests the shape of the letters. On the next page there are five consonants introduced with *a*, on the following page are the same consonants with *e*, and on the following page with *i* (each set of syllables is introduced with pictures). Page 7 uses some of this array of syllables in words. Page 8 introduces these same syllables with length and nasalization. Page 9 adds the syllables formed by the same consonants with *o*, and page 10 presents a brief review in the form of words and syllables. Page 11 introduces three new consonants with all of the vowels, and some words which can be made from them. Page 12 is a syllable review chart. Page 13 introduces all the syllables formed by eight more consonants. Pages 16, 18, 20, 22 and 24 introduce three or four consonants each, in each case presenting all of the syllables at once, with practice in sentences. The intervening pages introduce closed syllables and vowel clusters, and present additional practice.

The three booklets developed to precede this basic primer introduce the same first eight consonants with all of the vowels. They are not presented in a single block, however, but are introduced gradually in the order in which they can be used most effectively for sentence and story material. Each page of these booklets has charts of the few syllables used on the page—together with those already taught—and sentences made from these syllables.

The first practice book is used following the presentation of the second group of eight consonants in the basic primer. It includes frame drill type of material which affords considerable practice in the reading of the syllables already introduced, but also stresses affixes and paradigmatic sequences. It closes with a story.

The second practice book provides a section of frame drill and story material to follow the introduction of each set of consonants in the main book.

PIRO (PERU)

(Esther Matteson, linguist. Reported by Joyce Nies.)

About 800 Piros have been contacted by Matteson and Nies. Most of

giga

giga   giga

giga   giga

gwa   gwa

gwa   gwa

Giga - gwa.

the men and boys have sufficient Spanish for trading purposes. Outside the bilingual school programme there are perhaps two dozen persons who are able to read Spanish mechanically but without much understanding of what they read. There are now about 200 who are literate in their own language as a result of the bilingual programme.

The primers are used in 11 bilingual schools established by the Peruvian Ministry of Public Education.

There is a series of 12 primers of from 40 to 48 pages, based on the Psychophonemic method. All the letters of the language are introduced in Primers 1 (nine letters), 5 (four letters), 7 (five letters) and 9 (three letters). Primer 2 is a review book, using few new words and no new letters or syllables. Primer 3 introduces few new words, no new letters, but it teaches consonant clusters by the use of affixes. Primers 4, 6 and 8 are for review and consist entirely of stories made from the familiar elements. Primers 10 and 11 re-teach the syllables of the language by use of sentence sequences, each page emphasizing a single syllable. Primer 12 is text for review and practice.

In Primer 1, each new letter is introduced with a pictured word, with repetition in word lists and in a sentence at the bottom of the page. There are 13 review pages using the words already taught in new sentences and three pages reviewing the words in lists. In Primers 5, 7 and 9 new letters are introduced with pictured words, but all repetition and practice is in sentence sequences or stories. In Primer 10 and 11 there are two key-words at the top of each page; one key-word begins with the syllable to be emphasized on that page, the other ends with it. The rest of the

papa

papa   neta

neta   neta

papa   papa

Papa neta.

<table>
<tr><td>papá</td><td>papá</td><td></td></tr>
<tr><td>veo</td><td></td><td>veo</td></tr>
<tr><td>papá</td><td></td><td>veo</td></tr>
<tr><td></td><td></td><td>papá</td></tr>
<tr><td></td><td>Veo al papá.</td><td></td></tr>
</table>

page is a sentence sequence or story using the syllable under attention at least once in each sentence.

In Primer 2 the few new words are presented at the head of the pages on which they occur, for the most part without pictures. The rest of each page has sentences or stories. Primer 3 has approximately the same format as Primer 2, but with the important difference that consonant clusters are taught in this primer. In Piro, person markers are single consonants which are prefixed to the verb stem. In verbs which begin with consonants this causes the formation of initial consonant clusters. Other affixes which are consonant initial can be suffixed to the verb. In the case of consonant final verb stems this results in medial consonant clusters. These clusters are taught, therefore, by the presentation of paradigmatic style sentence sequences.

Primers 4, 6, 8 and 12 present unbroken pages of story material.

This primer series has no syllable drill as such in the primers themselves, but the introduction of new syllables is as carefully controlled as the introduction of new letters, and there is ample syllable drill outside the primer in the supplementary materials.

This set of primers is a revision of an earlier set. The revision specifically takes care of four problems encountered in the original set.

First, there is much more provision for practice and repetition in meaningful sentence sequences and stories; much of this practice is with the first nine letters taught, as Primers 2, 3 and 4 have *no* new letters. Thus the techniques of reading are thoroughly taught and practised with a minimum of memory load.

Second, the new series is geared to syllable teaching. In the old series, for example, the order of introduction of letters and syllables was as follows: *gi, ga, gwa, wa, twi, ta, wi, xa, ti, pi, xi, pa, pwa, po* (to the middle of Primer 1). The corresponding sequence in the present series is as follows: *pa, ne, ta, to, po, no, na, pi, ni*. On charts, the contrasting pattern of introduction looks like this:

a	i	a	e	i	o
ga	gi	pa		pi	po
ta	ti				
xa		ta		ti	to
	pi				
wa	wi	na	ne	ni	no
gwa					
	twi				

This means that in the new primer, three consonants are each taught with each of three vowels and only one syllable is isolated, whereas in the old primer three consonants were each taught with two vowels but there are four consonants which are taught as isolated units.

Third, there is specific provision for teaching the consonant clusters early so that they will not present difficulties later (see comments on Primer 3 above).

Fourth, a number of obligatory affixes are deliberately taught early and thoroughly, to prepare for fluent reading. For example, -tka 'already' is presented on page 32 of Primer 1, and -ne 'plural' on page 39.

SHIPIBO (PERU)

(James Lauriault, linguist.)

There are 8,000 to 12,000 Shipibos. About 97 per cent of the men are sufficiently bilingual for trading and the like. The women and children are monolingual except that some of the women understand a little Spanish. There are very few true bilinguals. Apart from the influence of the bilingual schools, the people are about 94 per cent illiterate.

The Shipibo primers are in use in eight bilingual schools established by the Peruvian Ministry of Education.

There is a series of five primers averaging 32 pages (and four more in preparation), prepared by the Psychophonemic method. The letters of the language are taught in Primers 1, 2 and 4. Primer 3 is a review primer and Primer 5 is a reader with simple text material.

In the first primer, new words are introduced by pictures and repeated in word lists and in phrases and sentences.

In the later primers there is also material for teaching syllables; words are listed with identical syllables under each other as follows:

tapiti
tapan
tari

There are also word build-ups:

jane
nahuë
nane (this is the new word to be
figured out by clues from the other two.)

taqui

taquiriqui

capa

caparigui

capa

1. taqui hani

2. capa hani

3. caparigui hani.

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         tibe
         es un tibe
         ardilla
         es una ardilla
  ardilla
1. un tibe grande
2. una ardilla grande
3. La ardilla es grande.
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In all of the primers there is emphasis on connected thought sequences. Primer 1 is organized around possession, carrying, giving. Primer 2 talks about painting clothes, cooking, killing animals, agricultural activities, trees, etc.

The most significant contributions from Lauriault's Shipibo materials have to do with technical matters in the planning of the primers, rather than in the format of the primers themselves. The material in Part 2 on phoneme counts, non-ambiguous pictures and the early introduction of digraphs and diacritics largely results from Lauriault's research.

SPANISH (PERU)

(Elaine Mielke Townsend, linguist.)

A set of two Spanish primers, prepared by the Psychophonemic method are being used by the Peruvian Ministry of Education in the 'Plan de Alfabetización y Educación de Adolescentes y Adultos'. The primers have proved successful in three pilot experiments, and are now being used by teams of teachers with mobile trucks who are working on literacy over a wide area.

The primer series consists of two books of 36 pages each, in which all the letters of the Spanish alphabet are introduced.

The general format of the two booklets is identical; 36 of the possible CV syllables are introduced by a pictured word beginning with the syllables. There is at least one such pictured word for each consonant except *rr*, *x*, and *z*. In addition *es*, *al*, and one syllable each with *fl*, *cl*, *cr*, *pl* and *tr* are introduced by pictures. The pictured words and many others made of the same letters are repeated in word lists and in sentences.

Review pages have numbered phrases and sentences. Unrelated sentences have been used throughout with the exception of three pages of connected material in the second primer. This was done deliberately in order to permit the introduction of the largest possible vocabulary in the limited space available—stories require severe limitation on the variety of vocabulary because of semantic and cultural limitations.

There is no syllable drill as such in the primers, but the introduction of new syllables as well as of new phonemes was limited so that syllables can be taught in connexion with the primers. Open and closed syllables and ambi-syllabic consonant clusters are used from the beginning.

ZAPOTEC OF VILLA ALTA (MEXICO)

(Otis and Mary Leal, linguists.)

There are about 20,000 Zapotecs. Most of the women over 30 and the elderly men are monolingual. Many of the others use some Spanish. Most of the people under 40 can read Spanish at least mechanically, but with varying degrees of comprehension.

There is one primer, used in small classes by its authors.

The primer is a response to the special problem of semi-literate people. It is intended to be a bridge from mechanical reading of Spanish to the reading of Zapotec with comprehension and the use of materials now available in Zapotec. Literacy in Zapotec in turn may be used as a bridge to the understanding of Spanish and complete literacy in both languages.

The primer begins with a story using only those Zapotec letters which have roughly the same pronunciation in Spanish. Then the uniquely

¿échi nána ácha rará chiní?

échi nána hué rará chiní.

¿échi Sára ácha rará chiní?

échi Sára tási rará chiní.

Questions and answers provide meaningful repetition. Primer 1, Tarahumara (Mexico).

¿échi tá ranára ácha rará chiní?

échi tá ranára tási rará chiní.

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Zapotec letters are introduced one at a time. Each page begins with several words—at least some of them illustrated— that use the new letter. Then there is a story using these words and giving much repetition of the letter being taught. Finally there is review of the new words at the bottom of the page. Additional practice is provided by a workbook with exercises in matching picture and words, in finishing words, in translation from Spanish to Zapotec, in solving crossword puzzles, etc.

There is no syllable drill as such. However, since the primer is designed for those who are already familiar with a syllable method in Spanish, this has not proved to be a serious defect.

Radio in rural adult education and schools in India

J. C. Mathur and C. L. Kapur

During the last 30 years of its existence, the radio in India has emerged as a preserver of indigenous cultural forms, as a promoter of healthy entertainment and as a medium for information and education. Activities in all the three areas have developed almost simultaneously though the main use of the radio is, as in any other country, for entertainment. This statement is, however, truer in the case of cities and towns, where at present most radio receiving sets are concentrated. In villages the radio is looked upon mainly as a source of information and as an aid to education, offering at the same time varied entertainment. Indeed, this role has come more naturally to the radio in India where the high percentage of illiteracy has compelled the large majority of people to rely upon the spoken word for information and knowledge.

While many items of All India Radio's general programmes are informative, it is only the special audience programmes that offer scope for an educational approach. Thus, AIR's news bulletins, news commentaries, quiz programmes, group discussions, national talks, etc., no doubt contribute to the sum total of the knowledge of the community and also stimulate thinking and discussion. But it is in the rural programmes, industrial programmes and school broadcasts that All India Radio can attempt a planned attack on ignorance and exercise a formative influence upon the personality of the special audiences. We shall consider separately the educational role of the radio through rural and industrial programmes on the one hand and school broadcasts on the other. We may, however, make it clear at the outset that at no stage has the radio been used for just formal education, nor has any experiment been conducted specifically for spreading literacy through the medium of radio among adults. It is education in its broader sense that has interested All India Radio from the beginning.

Adult education in rural programmes

BACKGROUND

After Partition,[1] all-round expansion of All India Radio took place. The main impediment—the people's suspicion of the foreign government

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1. The partition of India and Pakistan (August 1947), resulting from the Indian Independence Act, 1947.

Interviewing farmers in a Poona village.
(Photo: J. C. Mathur.)

—had disappeared, but Partition left numerous problems of internal adjustment within All India Radio still to be solved. First priority had to be given, moreover, to the installation of transmitters and to the opening of new studios. Every principal linguistic region expected a studio and transmitters of its own, and starting with eight stations in 1947, AIR has had to provide 28 stations by 1958. As the number of stations increased, the number of community sets and the provision of rural programmes also went up. In 1948 there were only 2,000 radio sets provided at common meeting places in villages. In 1954 the number had risen to 7,000. This was still far from satisfactory. A conference of state ministers was held to discuss the twofold problem of (a) the insufficiency of funds for the purchase and distribution of radio sets and (b) the lack of standard specifications for receiving sets being manufactured at cheap rates. In September 1954 a new scheme was introduced under which the Government of India meets 50 per cent of the cost of each community set (including also a loudspeaker, an aerial kit and a battery pack—unless the village has electricity). The price of each set varies from Rs.300 to Rs.350. The rest of the cost is met by the state government and the villagers. Maintenance is also the responsibility of the state government and the villagers. Consequently, the number of community sets in villages went up to 30,000 in 1956 and to 50,000 in 1958. It is hoped that by the end of the second five-year plan, the total number of villages with community sets will be about 95,000.

Up till 1939 the preparation of programmes for rural education was partly the responsibility of the provincial governments and partly that of All India Radio. After Independence, programme planning and production became entirely the responsibility of All India Radio, though some state governments (like the Uttar Pradesh) continue to provide staff of their own to help the local radio stations. Rural advisory committees were introduced for the first time in the year 1950. Till 1956, AIR did not have separate producers of rural programmes and some programme assistants took the programmes by turn. In 1955-56 it was decided to appoint assistant producers and producers of rural programmes to work as programme editors and also to produce some individual programmes.

Another interesting development is the farm forum. This type of activity was first used in September 1949. The object of these forums was to enable listeners to make effective use of the information provided in broadcasts for rural audiences and to encourage post-broadcast discussion. Eighty-one forums were formed in 1949 in the states of Delhi, Bombay, Madras and Uttar Pradesh and the number increased to 137 in 1950. Nevertheless, these farm forums did not provide for the formation of specific listening groups or for an intensive kind of broadcast or for a scientific assessment of the reaction of the listeners. It was early in 1956 that improved types of farm forums were introduced in an important community listening experiment. The scheme received financial aid from Unesco and was carried out by All India Radio in Poona with the co-operation of the Government of Bombay and the Tata Institute of Social Sciences. The project was undertaken at an opportune moment since the organization of the community projects and national extension scheme had already been attempted. The project consisted of three major phases: (a) organizing farm forums in the areas selected and ensuring their effective working; (b) planning and presentation of specially designed radio programmes; (c) scientific assessment of the discussion and conclusions arrived at by the forums, the effect of the programme on the members of the forum and the attitudes, and reactions of the community covered by the programme. These 150 forums will be discussed in detail later in this article. The success of this experiment has emboldened All India Radio to work out proposals for a similar project for every state. With the appointment of rural programme producers at different stations, the scheme is gradually being extended to other states.

One noteworthy development in recent years has been the prominence given in the general programmes of All India Radio to rural and folk music and to numerous cultural functions that take place at the capital and in large cities. Indirectly this has fostered confidence among the villagers and given a certain prestige to their arts and skills. All India Radio has been broadcasting once every quarter a national programme on regional folk music. This, too, has opened immense possibilities for the use of the folk song and folklore for educational purposes. While AIR is recording, preserving and promoting traditional folk songs, it is incidentally stimulating the making of new songs and new plays in the traditional style. This has been done in response to a need manifested by the rural programmes.

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This, then, is the background of the growth of the radio in India as a means of rural adult education. But, not until powerful transmitters covering large regions had been installed, was it possible to carry the rural programme to a large number of listeners. Even slower, in the beginning, was the process of installing radio receiving sets in the villages. Both these processes have been speeded up during the last six years. It will further be observed that, while intensive pilot projects have had their value, the linguistic pattern of India has necessitated the provision of facilities in practically all important linguistic regions. Thirdly, the development of these programmes during the last three decades shows the need for constant co-ordination between All India Radio and the state governments. While in the beginning, technical facilities were limited, the problem during recent years has been to ensure satisfactory organization by the state governments at the listening end. Fourthly, it is only in recent years that specialization in programme planning and editing has been attempted, though professional standards of programme presentation had been achieved even earlier.

PRESENT STRUCTURE, AIMS AND PRINCIPAL FEATURES

The rural educational programmes of All India Radio have been designed to bring information of practical use to villagers on various aspects of rural life and work, to widen the villagers' knowledge of national undertakings and international happenings and to provide them with wholesome entertainment after the day's labour. These objectives came into line with the great effort towards the all-round development of India's backward economy and the social progress of her people called for by the five-year plans. If the villager can be educated to realize his role in the development of the country and can be brought to play his part with confidence and understanding, then the educational process will have fulfilled its purpose. Against this background it is natural that mere

literacy should be given a priority lower than social education in the wider sense. To excite and satisfy curiosity and to stimulate new thinking have been the principal objectives of radio education.

From this have emanated certain broad features of AIR's rural programmes: (a) The programmes are directed towards the community rather than the individual listener. This means that special arrangements have to be made for a large number of community sets and for organized listening, there being very few individual radio owners in villages. It means also that the programmes are addressed to groups and the appeal is more of the public than of the intimate kind. (b) Regional languages and local dialects are mainly used for these broadcasts. This means that basically these are regional programmes though material for certain broadcasts may be centrally distributed. Habits, customs and local traditions vary from region to region and to be effective, the educational approach must take these variations into account. Thus, the exchange of programmes for these broadcasts is limited though it is being attempted to some extent. (c) Broadcast programmes are not merely agricultural but touch on all aspects of the typical villager's life. It is here that AIR's rural broadcasts, unlike those of countries with more progressive farming communities, are essentially of an educational rather than of merely utilitarian kind. The all-round development of the personality of the villager is the chief concern of the programme-maker. Market rates and weather reports are broadcast, it is true. But much more important are the inner needs of the villager, his intellectual demands, his spiritual yearnings and his hunger for wholesome entertainment. These are, therefore, not merely farming programmes but programmes of adult education and cultural development for the villager.

Three groups of organizations are concerned in education through radio in India. The first is All India Radio, its headquarters and its 28 stations. There is no central body other than All India Radio which looks after education through radio. Some stations and services of AIR are maintained almost solely for adult education of the rural and tribal populations. The Ranchi station, situated in the heart of the Chota Nagpur tribal area in the Bihar State, was opened in 1957 mainly for programmes for these tribal groups and the nearby industrial workers. Likewise, at the Gauhati station there is a separate service for tribal and rural populations, which broadcasts programmes in 28 tribal languages, practically all devoted to adult education in a broad sense. There are some other stations which, though they broadcast a good many general programmes, are noted principally for their programmes for the rural adult population. Cuttack on the East Coast and Rajkot on the West coast are two stations of this kind. The remaining stations either originate or relay rural programmes. Industrial programmes which are also meant for the education of workers are broadcast from the Bombay, Ahmedabad, Lucknow, Madras, Trivandrum, Nagpur and Calcutta stations. Every station originating adult education programmes for villages or industrial areas maintains a small unit of programme staff and artists, and though scripts and voices are occasionally taken from outside the main burden of the programme is upon this unit. At some stations, such as Lucknow, AIR's staff is supplemented by the staff provided by the state

government. Stations like Delhi, Srinagar and Jammu maintain not only programme staff but also field staff, both for technical supervision and for contacts with community centres. At Poona a farm forum organizer is attached to the radio station, and similar appointments are now wanted by all other stations too. Elsewhere AIR's responsibility is confined to the devising and presentation of programmes.

The second group of organizations connected with adult education through radio is that of the rural programme advisory committees consisting largely of non-officials. For every station originating adult education programmes, there is a rural programme advisory committee. The members of these committees are nominated by the Ministry of Information and Broadcasting usually from amongst names recommended by the local station director who keeps in contact with institutions and individuals working in the field of adult education, rural development and agriculture. These committees meet at least twice a year and sometimes more frequently. The station director places before the committee the programme schedule, proposals for special programme undertakings and a review of the programmes since the last meeting. Specific problems are also referred to these committees. Members sometimes make suggestions for new types of programme and offer criticisms.

Government departments constitute the third group of organizations associated with radio programmes for rural adults. Some government departments are represented on the rural programme advisory committees, but there is a much larger number of field officers who are also connected with these programmes. For instance, block development officers who are local heads of the Community Development Administration and are in charge of multi-purpose rural development programmes are often consulted. Under each block development officer there are two social education organizers who are in charge of most of the community centres and other rural centres where listening is arranged. Again, the Ministry of Information at the centre and similar departments in the states maintain field publicity officers and similar staff. These field publicity officers periodically send reports about the rural programmes. All India Radio seeks the co-operation of these bodies and personnel for the arrangement of special programmes. The Departments of Agriculture in all states have not only their own field staff but some of them also have officers whose responsibility it is to furnish material, including pamphlets, papers, field reports, etc., for broadcasting. The Indian Council of Agricultural Research, a body working under the authority of the Ministry of Agriculture, maintains a farm radio officer who is in constant liaison with All India Radio and who furnishes scripts and write-ups that can be used by producers. Similar units are also maintained by some states. In Orissa, the Textile Marketing Organization offered help to the Cuttack Radio Station to produce programmes connected with certain exhibitions. Thus, nation-building departments of the Government of India and the state governments play an important part in the programmes of rural adult education. There is no uniform pattern for the role of the government departments throughout the whole country. When, in 1956, the modified farm forum scheme was announced at the Poona station in the Bombay State, an interesting

A Burra-Katha performance (the ballad singer with his instrumentalists).
(Photo: J. C. Mathur.)

pattern was devised. An executive committee was set up, with which were associated the nominees of the Development Commissioner of Bombay (who is in charge of Community Development Administration for the whole state), the Director of Publicity and the Agriculture and Education Departments. Since a number of field officers were wanted for the preliminary organization of farm forums and as All India Radio did not have such personnel, all these government departments agreed to lend the services of some staff to AIR. The community centres in the villages were to be given small subsidies for secretarial work connected with farm forums. The Development Commissioner provided such subsidies in villages located in community development areas and the Director of Publicity did so for the other villages. The inspectorate of the Education Department helped in the supervision of the centres. It was an interesting example of co-ordination between several government departments. The extent of co-operation has, no doubt, varied from state to state. In all stations, however, there has been some difficulty in persuading government officers to give popular talks on their subjects, since the regulations prevent the usual fees being paid to them. The tendency now is to obtain material from them to be transformed into suitable programmes.

While there is a distinct advantage in obtaining their co-operation it must be admitted that under this arrangement no government department, not even the Education Department, feels a strong sense of responsibility towards the programme. It appears, however, that the Community Development Administration which at the village level is co-ordinating the work of all departments including the Education Department, would perhaps be the best agency for liaison with All India Radio. A scheme for the expansion of radio rural forums had, therefore, been drawn up providing for the training of social education organizers and block development officers in the formation of rural listening clubs and in arranging group listening. A beginning is to be made with the Tiruchi station in the Madras State and Patna station in Bihar.

There are other semi-government and non-official bodies and institutions which are indirectly associated with radio programmes. One such is the Central Social Welfare Board which has its branches in all states. This board has a number of field workers of different categories, who will now be called upon to arrange organized listening by women in the villages. Bodies like the Indian Adult Education Association and the social education boards in the states are not officially represented on AIR's rural programme advisory committees, but there is an exchange of information with them and whenever they have special seminars or courses AIR covers them.

Programmes

In the year 1957, All India Radio broadcast 10,920 hours of rural programmes, the duration of each programme varying from 45 minutes to one hour and a half. It is a daily programme, although some stations broadcast a weekly programme for women and children. Stations to which farm forums are attached broadcast in 12 languages (Hindi, Tamil, Telugu, Malayalam, Kannada, Gujerati, Marathi, Oriya, Bengali, Assamese, Punjabi and Kashmiri) and 48 dialects and 28 tribal languages. How is the adjustment made between the principal language of the region and the dialects? The solution varies sometimes from station to station. For example, the Delhi station which uses two principal dialects, Braj and Hariyani, has most of the Braj items in the first half of the programme and most of the Hariyani items in the second half. Patna which uses three dialects (Magahi, Bhojpuri and Maithili), finds it more practicable to present the entire programme interspersed with items in different dialects. Cuttack does not use any dialect, except for tribal items, but conducts its broadcasts in one language (Oriya). This is probably true of most of the South Indian stations as well. Gauhati, which broadcasts in 28 tribal languages (most of which are not written languages) and has very few artists and announcers, breaks up the service into half-hour periods, each period being devoted to a particular tribal language) the initial and linking announcements being in very simple Hindi understood in that region. Otherwise, the programmes are distinct and separate from each other. The more advanced tribal languages, such as Lushai, have programmes of their own.

What is the educational content of the programmes directed towards the rural adult? Though, for the sake of convenience, we should classify the programme content here, it should be remembered that the programme planner does not visualize a programme in compartments: the approach is always a multi-purpose one considering the entire personality of the adult listener. But a close analysis of the typical programme schedules would show that the contents of the broadcasts could broadly be grouped as follows:

Information of immediate utility. This would include the market rates and the weather reports and special government announcements.

Current affairs and general knowledge. This includes a variety of subjects. Every rural programme includes a news bulletin, based on the national

news bulletin, and also covers local news—all presented in dialogue form or as bulletins interspersed with queries. From time to time news analysis is also broadcast and there are talks on economic and political matters. There have been several programmes on the way of life and problems of people living in other parts of India. Tiruchi station, for example, has broadcast talks on the handicrafts, boat houses and co-operative farms in Kashmir. Anniversaries of famous men and institutions provide another opportunity for informative talks. Jullundur station had a whole series on 'Glimpses of History', the programmes being built around historic personalities such as Ashok, Alexander, Humayun, Ranjit Singh and other eminent men and women. Poona station had a series on human physiology called 'The Wonderful Machine of the Human Body'. Every station, of course, has plenty of programmes on the five-year plans and national development activities, not only in its own region, but in other parts of India as well.

Information designed to improve vocational proficiency or professional skills.
Broadcasts of this kind constitute the bulk of the spoken programmes. The main rural occupation being agriculture, these broadcasts are intensively used for providing agricultural education for the farmer. Such information may be given by the expert who deals mainly with advanced and modern methods of agriculture. There are other broadcasts in which specific problems of the tiller of the soil are discussed. Again, there are programmes in which successful farmers are interviewed and relate their experiences. Animal husbandry, agricultural crafts, cottage industries, bee-keeping, fruit-growing, marketing, etc., are extensively covered by these programmes.

Closely connected are programmes of more direct instruction. Lucknow station, for example, often uses the radio for the teaching of crafts such as sewing and weaving. Tiruchi station has broadcast a series called 'Guide to Careers' giving an idea of employment possibilities for men in the villages and providing hints for skilled workmen. Programmes on the work of a wireman, a road-roller driver, a soap-maker, and a leather tanner were broadcast.
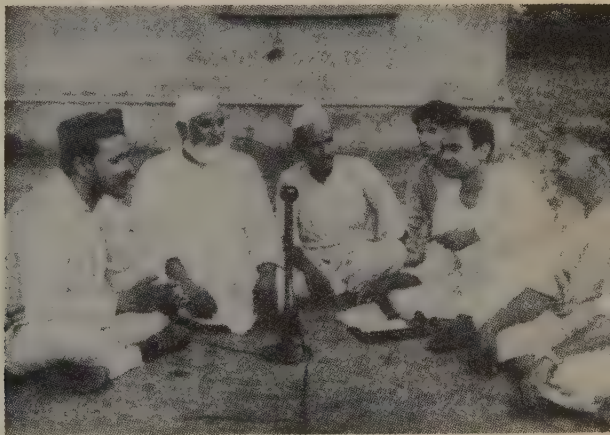
Interviewing the village chaupal *(rural club)*.   (Photo: J. C. Mathur.)

Health and daily life. Health education and hints on sanitation occupy an important place in rural education and their range is unlimited. Programmes on such subjects as 'Skin Diseases and how to prevent them', 'Why Children eat Soil', 'How to protect ourselves from Water-borne Diseases', are examples of the kinds of subject tackled.

Habits, social behaviour and citizenship call for intelligent handling and practically every station of All India Radio broadcasts programmes on these subjects. Delhi station had, for example, a series called 'Amrit Varsha' which included talks and discussions on such subjects as 'The Abuse of Philanthropy', 'Objectives of Peace', 'The Uses of Adversity', etc.

Cultural expression and entertainment. Music, plays, sketches, etc., are not only a means of entertainment but an aid to the expression of personality. Every programme includes a substantial quantity of folk music, devotional music, plays, stories, etc. But care is taken to convey through some of these entertainment programmes, occasional bits of moral or useful information. This is never resented, nor does it, in the case of folk songs particularly, take away from the artistic quality of such programmes.

There are cultural programmes of another kind also. Practically every station broadcasts programmes about festivals, about various forms of dances and, above all, on literature. In fact, one of the most popular programmes, particularly in North Indian stations, is the Kavi Sammelan, or symposium of poets at which the rural poets recite their compositions. This programme has in some regions given a new life to folk poetry and has stimulated creative activity of a kind made possible only by the radio.

All India Radio has evolved a convenient and simple method for the presentation of rural programmes. It is based partly on improvisation and partly on preparation and depends upon the experience and mental agility of a number of trained staff artists. The basis is the village club. The village club is an institution common practically to the whole of India. It is not a formal club and there may be more than one such club in a village. It consists of a number of elderly persons of various castes who often get together for a smoke after dinner at a central place. Perhaps its origin is the 'Bhagavat Ghar' or the place for the recital of mythological legends incorporated in the Bhagavat. Later, when learned Pandits were no longer available, it became a centre for gossip. It is known as the *Chaupal* or *Panchayat Ghar* or *Bhagavat Ghar* and by similar names in different parts of India. This institution has been borrowed by the radio. Every station has its own *Chaupal* or *Panchayat Ghar* or *Bhagavat Ghar*. These four or five staff artists may represent types of elderly villagers in that region. The leader or the *Chaudhuri* usually speaks in a little more polished language than the others and sometimes interprets things to the other members. There is always an element of humour and some leg-pulling. In the informal conversation of these characters are scattered words of wisdom and of advice; they introduce talkers, players, singers and mimics. It is an hour of fun and useful information. Several stations have built up characters that have endeared themselves to listeners and if ever the radio ventures to tamper with these characters there is an outcry. In 1957, for a few months the Cuttack station tried to replace

this pattern by programmes directly addressed to the listeners. This met with much disapproval and there was immediate demand from the listeners for a change back to the accepted pattern.

The technique implies that while the skeleton of the programme is improvised, there may be items which have been fully prepared and some even pre-recorded. They include talks, plays, documentaries, features, newsreels and songs. A new experiment of some significance is the use of the traditional form of folk drama for new themes. Delhi station broadcast a *Nautanki* (folk play of Northern India) on the famous Bhakra-Nangal Dam and Tiruchi station broadcast a *Kuruvanji* (traditional dance-drama of the south) on the Bhavani project. Serial plays from Patna built around a retired soldier living in a village and getting into all sorts of scrapes have been extremely popular. Kashmir station has introduced Niza Saib emphasizing the importance of adult education in a featured form.

An effective method of both programme presentation and education is audience participation. Some stations take the microphone, at fixed intervals, to one village or the other and record programmes that are to be broadcast subsequently. These recordings may be of group discussions, interviews or of village singers. Sometimes villagers are invited to the radio station. During the Radio Week at some stations, one day is earmarked for the village listeners, who are free to come to the station. Radio artists also visit villages and present audience performances which are recorded, with the reactions of the villagers. Special functions and festivals in the villages, such as *Vikas-Melas*, are covered by rural newsreel programmes.

The listening end. There are at present 170,000 radio sets in Indian villages, of which 50,000 are of the community listening type, the majority of the latter having been distributed under a scheme involving payment of 50 per cent of the cost by the Government of India and the remaining 50 per cent jointly by the state government and the rural community. The specifications of these community sets are worked out by the Research Department of All India Radio and the sets are bought centrally by the Government of India and distributed to the state governments. The state governments arrange for their installation in the villages. Maintenance is the responsibility of the villagers, but several state governments have now adopted the scheme proposed by the Government of India for the maintenance of staff and equipment at various centres and the upkeep of the sets, the cost of the spare parts being met by the villagers. Of the community sets, a large proportion are operated by dry batteries, and a small number mains-operated. Some have still wet batteries. The policy now is to have dry battery sets and to arrange for the replacement of the batteries on payment by the villagers.

The set is kept either at the residence of an important person in the village or in the village *Panchayat* (the village court) or a shop or in the school or community centre. Either a village official or some other person in the village is made responsible for the custody of the set. Listeners usually squat on the ground and only where a proper *Panchayat Ghar* or community centre has been constructed are there better arrangements

for seating. Sets in a community development block village are kept at the community centre which has usually a building and other facilities. The village level worker at the community centre looks after the set.

The extent of listening and the kind of response of the audience varies considerably, depending upon whether the village has a properly organized radio farm forum, or whether it is located in the community block area, or whether it has neither of these facilities. Listening villages, thus, can be classified in three categories. There is no doubt that where, as in the case of the Poona experiment, radio farm forums were properly organized, regular listening has been ensured. In a community block village, the general atmosphere is one of interest because of the community centre and its activities. The radio set in such villages therefore draws a larger audience. In other villages, not only is the audience restricted but the response is of a passive kind.

This observation has been confirmed by the analysis of audience research conducted by the Listener Research Division of All India Radio during the last four years. In 1954, pilot studies were carried out in four to five villages in each of three regions, in South India around Tiruchi station, in Eastern India around Calcutta station and in Western India around Bombay station. These were sample surveys and were carried out in villages which had neither farm forums nor any noticeable community development activity. It was found that from 9 per cent to 14 per cent of the persons contacted were regular listeners to programmes. Since in every such village there was only one radio set, these percentages cannot be regarded as unsatisfactory. Most of the listening was casual, certainly not regular, and the principal reason given was preoccupation with other work on the farm or at home. It should be remembered that presence at the community set implies a certain amount of preparation and giving up some engagements at home. In more advanced countries with facilities for home radio sets or wired broadcasting, this kind of special effort is hardly necessary. About 14 per cent to 30 per cent of the listeners had a clear recollection of the specific items that they had heard. Women seldom listened to radio programmes. In these villages it was found that literates and younger people showed keener interest in the radio programmes than others. In the Bombay villages the farmers were found to be fairly enthusiastic about the programmes. Practically all the listeners were satisfied with the simplicity of the language of these broadcasts. Devotional songs, radio plays, folk songs and talks on cultural matters appeared to be more popular than other programmes. Certain sections of listeners, particularly shopkeepers, were keenly interested in market rates.

Some four years ago this was the picture in villages which had no advantage whatsoever and where organized listening had not been attempted. With this may be compared the survey conducted in 1956 in 40 villages around Poona. Of these, 20 were villages where the radio farm forums had been formed under the modified scheme and 20 were non-forum villages. The latter were taken as the control group. These were further classified as community project and non-community project villages. About 400 people were interviewed both before the

special broadcasts were given and after the broadcasts. There were occasional observations during the broadcasts also. This exhaustive survey, of which the results are available in detail in the report being published separately by Unesco,[1] showed the success of the radio farm forum as an agency for the transmission of knowledge.

Adult education for industrial workers

The industrial programmes of All India Radio are confined to only seven stations: Bombay, Calcutta, Lucknow-Allahabad, Madras, Trivandrum-Kozhikode, Ahmedabad and Nagpur. There is a possibility of another programme being introduced from Ranchi station, close to the steel city of Jamshedpur. The total duration of the programme in a whole year came to 1,173 hours, the daily programme time varying from 20 minutes to 30 minutes at each station. The language of the programme depends upon the language spoken by the bulk of the workers to whom this programme is directed.

While Madras and Nagpur broadcast their programmes during the midday lunch interval, the others broadcast them during the break in the evening shift. Trivandrum-Kozhikode broadcasts its programme from 4 to 4.30 p.m. The programme is broadcast by most stations daily

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1. *An India Experiment in Radio Farm Forums,* in preparation.

but Madras, Trivandrum-Kozhikode and Lucknow-Allahabad skip one or two days in the week.

In planning the programmes, stations have the help of the Ministry of Labour and Employment, the labour welfare officers of the factories and the trade union officials. There is an Industrial Programme Advisory Committee for every one of these stations. This committee reviews the programmes and offers suggestions for their improvement. It includes both official and non-official interests in industry.

An analysis of some of the industrial programme schedules shows about 55-60 per cent spoken-word content and about 40-45 per cent music, though the proportion may vary from station to station. The object of the programme is to acquaint the industrial worker with the law and problems of industrial establishments and the rights and duties of labour, to improve his general knowledge and his understanding of current affairs and to provide for him entertainment that is both pleasing and inspiring. Unlike the rural programmes, the industrial programmes do not use the technique of the club or *Panchayat*. The programme is compèred by one voice which introduces plays, interviews, speakers, etc. The speakers are mostly chosen from among specialists, welfare workers and officials. At some stations, as in Nagpur, a special attempt has been made to record variety programmes presented at labour welfare centres and to broadcast them subsequently. Letters received in the Programme Unit are also answered.

In 1958 a new programme directed towards the plantation labour in the tea plantation area of Assam was introduced from the Gauhati station. The programme is compèred in Hindi, though there are items in different languages. The problem of language is complex in that region because, though the tea plantations are in Assam, the labour is all drawn from Bihar, Orissa and Madhya Pradesh and the language is a kind of patois which is basically Hindi. At present, therefore, the programme is essentially a composite entertainment hour consisting of a variety of folk songs and folklore, interspersed with simple spoken-word items of interest to the tea labourers. The position will be reviewed after the programme has been going for some time.

AIR's Listener Research Department has conducted special surveys in some of the mill areas where these programmes are given. The survey discloses an urgent need for the mill owners and also the trade unions to arrange organized listening if full benefit is to be got out of the adult education programme. Wherever mill owners and trade unions have been indifferent, as in the Ahmedabad region, the results have been very disappointing. Elsewhere, as in Madras State, a livelier response to these programmes was noticed. Experience in Ahmedabad shows that instead of installing the radio sets in the canteen where the workers come in a hurry to grab some tiffin and rush back to work, it would be better to install them near their tenements. Even the Welfare Centre has not invariably been found to be a satisfactory listening place; there is always some noise going on on account of the indoor games. It is felt that attentive listening to programmes would be possible if sets or loudspeakers were installed at a central place in every workers' residential area. Secondly, the formation of listening clubs appears to be a necessity.

At present, the canteen manager or the person in charge of the Welfare Centre is supposed to look after these sets. The results are not satisfactory. Some sets have been installed by co-operative societies but they are indiscriminately put on and usually only the light programme is tuned in. This, however, is not the position in Madras State where a recent survey indicated considerable interest in plays and features broadcast in the industrial programme. An interesting sidelight is that the industrial programme is also listened to by a considerable number of general listeners, some of whom are in correspondence with the stations.

Radio in school education

The role of the radio in school education in India is meant to be largely complementary and corrective. Rapid expansion of school education since independence has inevitably led to the shortage of trained teachers. Modern and progressive methods of teaching are confined to a handful of schools. Besides, a baneful inheritance from the past in the form of excessive emphasis upon examinations, tends to restrict the scope of information and of teaching. General knowledge, cultural training and popular science are consequently apt to be neglected except in so far as they coincide with examination syllabuses.

Against this background, the radio offers to the teacher in India timely help and useful guidance. The aim of All India Radio has been first to provide a corrective to the widely-prevalent tendency of school education to be bookish. AIR programmes seek to bring the world into the class-room and to enrich experience. Secondly, an attempt is made to equalize opportunities for the inadequately-equipped and remote schools, of which the number in India is many times greater than that of well-equipped schools. Thirdly, these broadcasts, discarding the division of studies into subjects, endeavour to build up learning around real-life situations and to emphasize the social relevance of knowledge.

Programmes for schools now originate from 14 stations of All India Radio and are relayed from another seven thus giving a total of 21 stations. The service is largely regional and stations serving different language areas use the language of the pupils to whom the programmes are addressed. Broadcasts to schools are, at present, being put out in 13 languages and plans for putting out such programmes in Assamese and Oriya are under way.

School broadcasting in India can claim to have a history longer than that of All India Radio itself. In fact, even before the establishment of the short-lived Indian Broadcasting Company in 1929, educational programmes in Tamil for primary schools were being put out by the Madras Corporation, which had a transmitter of its own as far back as 1927.

As in many other fields of progress, the real turning point in the development of the school broadcasting service came with the independence of the country in 1947. Up to 1951, however, no distinction was made between school licences and licences for domestic use and it is thus not possible to say how many school licences were issued. In that year, it was decided to reduce the licensing fee for educational institutions from

Rs.15 to Rs.3 per annum, and separate figures for school licences are now available. One way of assessing the acceptability of broadcasts to schools is to study the figures for school licences in force. In 1951, only 2,380 schools possessed radio receiving sets. In 1952 an increase of 600 licences was recorded. On 30 June 1958, the number of licences in force had risen to 13,386. Looking back over seven years one finds that the number of radio receiving sets in schools has risen to six times what it was in 1951.

In the second five-year development plan, the Ministry of Education of the Government of India, has a scheme providing for a 50 per cent subsidy to state governments anxious to equip schools with radio receiving sets and a speaker system in classes.

But the increase in the number of school licences in force does not tell the whole story. Recent surveys reveal that a considerable percentage of the receiving sets in schools are lying derelict and others are not being fully utilized. To remedy this position, All India Radio has been holding short in-service courses for secondary school teachers in the installation, manipulation and maintenance of radio receiving sets and the utilization of school broadcasts. Similar courses have been arranged in teacher-training colleges for pupil teachers under instruction. To promote awareness of the value of broadcasts to schools and to give confidence to the teachers in handling the receiving sets, universities are being persuaded to include the study of radio in education as part of the study of methods of teaching for candidates preparing for diplomas and degrees in teacher education. These courses, it is hoped, would ensure a wider and more intelligent handling of school programmes at the listening end.

From what has been stated earlier, it is clear that mere increase in the number of radio receiving sets cannot be taken as the sole index of the wider acceptability or of the growing popularity of programmes. The fact is that in the earlier stages broadcasts to schools were very largely

taken as an occasional diversion or at best as an entertainment which could be listened to in the recess period or after school hours. There was hesitation on the part of teachers to make use of broadcasts unless, by chance, the programme came very close to the curriculum. In a system of education which gives undue importance to examinations, such an attitude can easily be understood. Radio programmes professedly promote knowledge of worthwhile things in a general way and it is only the teacher with imagination who can be expected to welcome such a new aid to education. The less progressive teacher looks upon it as a distracting innovation, if not a waste of time. Until recently, talks—not very different from class-room lessons—dominated school broadcasts since most of the contributions came from teachers who did not appreciate the special technique of broadcasting. This was also partly responsible for the limited appeal of school broadcasts among even progressive school teachers.

SOME RECENT DEVELOPMENTS

In order to achieve better co-ordination between AIR and schools and the education departments of state governments, several experienced educationists and teachers have been appointed producers and assistant producers of school broadcasts at headquarters and in stations. They are responsible for the planning and editing of programmes and the production of some items.

A no less urgent need was training, not only for AIR personnel, but also for teachers, script-writers and others who contribute to programmes or are responsible for organized listening.

It has been mentioned before that short in-service courses for secondary school teachers have been organized by All India Radio to promote among teachers a greater awareness of the value of broadcasts to schools and greater confidence in handling the radio receiving sets and other listening and play-back equipment. The first course of this type was held in Jullundur in December 1956 and similar courses have since been held in Jaipur, Delhi, Trivandrum, Bangalore, Hyderabad, Gauhati and Srinagar. In co-operation with the All India Council for Secondary Education, All India Radio contributed its share to the success of a seminar for headmasters and educational administrators, recently held in Jodhpur under the auspices of the state department of education, and another held at Solan in Himachal Pradesh.

Institutions for teacher education seem to be realizing more and more the value of such training for teachers, and two such courses were recently held in Rajasthan—one in the Government Training College for Teachers, Bikaner, and the other in the Govindram Seksaria Teacher-Training College, Udaipur. Panels of script-writers are being built up in all stations and a three-day seminar for script-writers, organized by the Bombay station, has been held. This seminar was directed by Mr. J. R. Reed, Assistant Head of School Broadcasting, BBC, whose services were lent to AIR. All India Radio employs script-writers on short contracts, and on commission for series or individual broadcasts. A 10-day seminar of producers and assistant producers and programme assistants

working in the school broadcasting units of the regional stations was held in December 1957, also under the direction of Mr. J. R. Reed. The seminar made it possible to pool the scattered experience of regional stations and gave an opportunity to persons engaged in like work to make fruitful contacts.

Plans for the establishment of a central scripting and production unit for the school broadcasting service are under way. This unit will be charged with the responsibility of producing master-scripts for the use of stations. The plan will make it possible to put more thought and money into the production of programmes and incidentally to economize effort and expenditure occasioned by the duplication of uncoordinated effort by regional stations.

REPETITION OF PROGRAMMES

In the initial stages, there was a marked tendency to care more for novelty than for quality in programmes. Each station was anxious to give 'new things' each time or old things in a new form. The result was that the quality of programmes suffered. Now that programmes of enduring value and more-than-local interest are being selected for planned repetition, improvement is well in view.

PROGRAMME EXCHANGE

A central exchange unit has also been set up to enable stations to make use of the more outstanding programmes produced by other stations and thereby to save effort and expenditure.

Programmes are being exchanged with foreign broadcasting organizations as well. Programmes, pamphlets, scripts and transcriptions are regularly received from the United Kingdom, Australian, Canadian and New Zealand broadcasting services. With Australia and Holland, the school broadcasting unit of AIR has already established an exchange service and programmes are being produced for international exchange by the All India Radio. One such programme on 'The Holy Ganges' was produced recently. Australia produced a programme on 'Wool in Australia' for our school broadcasting service. Such exchange of programmes is sure to promote mutual understanding.

SUPPLEMENTARY MATERIAL—SUPPORTING LITERATURE AND PAMPHLETS

Stations putting out school broadcasts publish charts, pamphlets and folders giving illustrations and notes to enable fuller appreciation of certain series of programmes. Bombay publishes such pamphlets in English, Marathi and Gujerati, while other stations have them in the regional language of the area. The charts and pamphlets are mailed direct, free of charge, to the listening schools registered with the station. The charts are for display on the notice-board and the pamphlets are intended to guide the teacher, who in turn guides the listening, and the listeners themselves. Jaipur and Trivandrum put out vacation pro-

grammes and issue folders containing notes for individual listening by the pupils without the guidance of the teacher.

The question of improving supporting literature, both in volume and quality, is engaging the attention of the organization, as it is felt that sound broadcasts must invariably be supported by the printed word if they are to succeed in leaving a more intimate and enduring impression on the listeners. So far, literature of this type has been slender in quantity and not always timely. One reason for this has been that programmes were, till recently, planned on the basis of school terms and most of the stations were living from hand to mouth. The idea now being adopted is to plan for the whole year in advance. This will enable stations to have ample time for the development of programmes and the schools more time for planning the listening.

PLANNING OF PROGRAMMES

Planning of programmes is very largely left to the initiative and resources of the regional stations. The stations keep a suggestion book in which visiting teachers and educationists occasionally give suggestions regarding subjects and series to be included in programmes for schools. Correspondence also brings in a small harvest of such suggestions. But much depends on the background and contacts of the producer or the assistant producer in charge of organizing broadcasts for schools. He draws up a list of subjects and suggests titles for series and for individual broadcasts. The station then calls a meeting of the consultative panel, an advisory body consisting of representatives of the Education Department and a few others interested in radio in education. The audio-visual education officer of the state Department of Education is *ex officio* a member of the consultative panel and the station director is *ex officio* chairman. The proposed schedule comes up for discussion before the panel, and when this body has given thought to it and reached agreement, the station director sends the provisional schedule to the headquarters of AIR, where the chief producer of educational programmes scrutinizes and assesses it, suggests modifications and occasionally narrows down or widens the scope of a particular series. Sometimes, he makes suggestions regarding the form in which a programme should be presented. The station usually incorporates the suggestions and lists possible broadcasters from the teaching profession or from the ranks of writers and journalists. The script when received is checked by the station and, if it is approved, the programme is put on the air, either as a live broadcast or pre-recorded.

RESPONSE OF THE AUDIENCE AND METHODS USED TO
MEASURE RESULTS

Periodically AIR institutes listener surveys. Such surveys of school broadcasts conducted by the listener research sections of Bombay, Calcutta and Madras in the year 1956 brought to light certain facts which very largely form the basis of the service's present re-organization and development programmes. Questionnaires were addressed to listening schools with the object of ascertaining the situation with regard

to listening and obtaining the views of experienced educationists on the purpose and value of broadcasts to schools. Madras, Bombay and Calcutta issued 2,418, 1,413 and 1,556 questionnaires respectively, giving a total of 5,387. Replies numbered 3,400: 1,712 from Madras, 751 from Bombay and 937 from Calcutta. The response was highest in Madras —69 per cent. In Bombay, the percentage was 53 and in Calcutta 60. The overall percentage of response was 62.6. The survey revealed that the radio receiving set was generally placed in the principal's or the headmaster's room and very few schools had the 'speaker system' in classes. On the basis of this report, state governments and the Ministry of Education of the Government of India, were approached with requests for the provision of the speaker system in a few class-rooms in every listening school.

Intensive publicity has been undertaken to impress on the schools the value of listening to broadcasts in the class-rooms under the guidance of the class teacher. Collecting the whole school in an auditorium has been very largely replaced by class listening. Short courses for secondary school teachers have given to many a clearer understanding of the way the programmes can be utilized to greater advantage.

TIME FOR SCHOOL BROADCASTS

Fifty-five per cent of school authorities think that broadcasts should be in the school time. Twenty-one per cent, however, were of the opinion that broadcasts should take place during the lunch interval. The figures shows that the full significance of broadcasts to schools is not clearly appreciated. It is now being more widely realized that broadcasts to schools are not an imposition but a help and can be used to further educational purposes and class-room procedures and activities.

Another point, on which opinion was sought was, 'Should listening to school broadcasts be made compulsory?' Fifty-six per cent were of the opinion that listening to school broadcasts should be made compulsory, while 44 per cent held the opposite view. AIR does not favour compulsory listening. Compulsion will make school broadcasts a routine affair and may even produce a distaste for listening to the radio. Besides, the listening equipment in schools is still far from the required standard and compulsion at this stage would not have much significance. The acceptability of programmes will depend on their quality—both in form and content —and AIR is doing all it can to improve the quality of programmes and to make their value so obvious that no progressive school can afford to miss them.

FREQUENCY OF LISTENING

Forty-two per cent of those replying to the questionnaires expressed the view that two periods a week might be set apart for each class for listening to broadcasts to schools; others considered that one period a week is enough in the initial stages. All India Radio favours listening by each class to one programme a week, at least. But there is no idea of laying

down any rigid formula. Listening should be purposeful and fit in easily with the school activities. Over-insistence at this stage might ruin all chances of wider utilization in the future.

Looking back and ahead

The potentialities of the radio as a medium for education in India are considerable, and what has so far been done touches only the fringes. While AIR's own programmes need to be constantly reviewed and improved upon, it can reasonably be claimed that AIR has been producing a constant stream of useful and informative programmes for both adult and formal education. A large staff is engaged on this work and substantial funds are earmarked for it. What, then, has stood in the way of a fuller exploitation of this medium for education? Perhaps the answer is the scanty attention given to the use of the radio by institutions and organizations directly responsible for adult and general education. So far as adult education is concerned, it has come within the purview of the governments only during the last 11 years, though it is true that when the congress governments were first installed in the then provinces, in the thirties, some mass literacy movements were organized. The planning of adult education is, therefore, not yet crystallized and there appears to be a tendency to try out a number of different methods at the same time. All India Radio feels that once the community development administration (which at present co-ordinates the work of other nation-building departments) takes up the task of organized listening in villages, the radio might well become the most convenient and effective medium for social education in rural areas. This is confirmed by recent experiments to which reference has been made in this article.

As a medium for cultural expression and for the promotion of folklore and folk culture, the radio has emerged as the sole pioneer in India. It has stimulated talent and has given to folk literature a kind of stimulus which brings it out of the restricted sphere of the musuem and the library. It has given it new vitality which is making an impact on general literature and culture. And it may be that this educative influence of the radio is more clearly perceptible in India than in other parts of the world.

It is only in recent years that the Education Departments in various states have come to realize that audio-visual education is not merely the showing of films and filmstrips, and that in a poor country like India the radio can be a more effective aid to education than several more expensive media. At present the position regarding organized listening in schools and colleges is unsatisfactory—perhaps not very different from that which obtained in British educational institutions in the twenties when the BBC sometimes had the exasperating experience of broadcasting without being adequately heard. But things are changing fast and it is hoped that within a year or two the radio will emerge as an important factor in school education.

We have not yet reached the stage at which television could be considered a competitor in this field. All India Radio hopes to launch an experimental television service from Delhi for community viewing and

adult education early in 1959, but there is no intention of treating this service as a forerunner to a chain of television services throughout the country. Our first task is to carry the radio to the 500,000 villages of India. So far as transmission is concerned, radio coverage has been practically achieved and AIR's programme can be heard in every village, but listening facilities are still far behind and until those facilities are provided in every village it would be futile to think in terms of television. There are innumerable difficulties. Radio receivers are not yet manufactured in India; they are only assembled. The cost of the set is still beyond the reach of the common man. Community sets that are being distributed present the problem of maintenance in areas with no electricity and few technicians; yet as the figures quoted elsewhere in this article show, there has been a rapid development. In India there are so many problems to be tackled all at once that one often does not know where to begin. Here, however, a beginning has been made and the future seems to hold bright promise.

Notes
and
Records

Establishment of an international council for film and television

The idea—which might be thought somewhat over-ambitious—of establishing an international institute in the field of photography was prompted by the confusion prevailing alike in the sphere of still photography and in that of cinematography.

In 1955, talks attended by the most eminent authorities on the subject from all parts of the world were held at Unesco's Headquarters under the chairmanship of Professor Rivet. These talks led to the foundation of an International Centre for Still Photography and Cinematography, which embarked upon the study of various projects, including one for an International Institute of Film and Television. In August 1956, a meeting held at Venice, at the invitation of the organizers of the biennale and under the auspices of the international centre, expressed a wish that the General Conference of Unesco should invite the Director-General of that Organization to consider the problem.

It was, indeed, at the ninth session of the General Conference (New Delhi, 1956) that the project took shape, with the adoption of a resolution inviting the Director-General to investigate the possibility of establishing an international body in the field of film and television, whose membership would include both professional associations and federations pursuing cultural, artistic or educational aims, to provide a centre for international co-operation and co-ordination.

Unesco's Department of Mass Communication requested Mr. Benoit-Lévy, former head of the Radio and Visual Services Division of the United Nations, to undertake, in conjunction with its own services, the preliminary work entailed in constituting such a body.

In view of the interest shown by the principal international associations, a committee of 12 experts, chosen for their professional competence, met several times in Paris to prepare draft statutes.

The document finally produced was very favourably received, and Unesco invited the various international associations concerned to meet at Unesco House on 21, 22 and 23 October 1958, to discuss the setting up of a council on the lines suggested. Twenty-five of them sent representatives to this meeting, and on 23 October 1958 the International Council for Film and Television was established. It has since been joined by nearly all the international associations dealing with films and television.

The following were elected to form a provisional bureau: Mr. Maddison, International Scientific Film Association, Chairman; Mr. d'Arcy, European Broadcasting Union, 1st Vice-Chairman; Mr. Jay, International Newsreel Association, 2nd Vice-Chairman; Mr. Verdone, International Committee of Film Education and Culture, Secretary; Mr. Suchy, International Broadcasting Organization, Treasurer (Honorary); Mr. Diaz, Asociación de Prensa Filmada y Televisada (PAINT), 1st Alternate; Mr. Verniers, International Centre of Films for Children, 2nd Alternate. Mr. Benoit-Lévy was appointed Delegate-General.

The provisional bureau met on 16 December 1958 to draw up a definite programme embodying the wishes

expressed by the various delegates during the tenth session of Unesco's General Conference. This programme was approved by the Extraordinary General Assembly which met at Unesco House on 16 and 17 February 1959.

The statutes, copies of which can be obtained without difficulty,[1] are inspired throughout by the basic ideas of Professor Rivet, as expressed in his message to the Venice meeting, when he said:

'I should like to say briefly that I feel it is most important to set up an International Film and Television Institute. This, in my opinion, would be an essential step towards co-ordinating the hitherto disjointed efforts of the many organizations that exist in various parts of the world, concerned primarily with the reproduction of sound and images, whether static or dynamic. Our idea is to bring together all these scattered bodies in order to make their action more effective and to husband their resources by associating them for the pursuit of their common aims, while ensuring, by elastic and comprehensive regulations, that each will retain freedom of action in its own particular field.

'Image and sound are the most effective means so far devised by the genius of man to spread knowledge, establish contacts between the different civilizations and foster tolerance—that great virtue, still so rare, which can develop only through a steadily enhanced appreciation of the necessary diversity of mankind, and which is indispensable to that peace to which every living, thinking and loving man and woman aspires. Picture and sound owe their power first and foremost to the extraordinarily wide public reached by films and television and to the fact that they appeal both to the élite and to the masses, to cultivated men and to the illiterates who, unfortunately still make up, in many countries, a large proportion of the potential audience. This unprecedented power lays imperative duties, both cultural and moral, upon those who wield it.'

The dream of a great scholar has thus come true thanks to Unesco, which has created a new organization designed to facilitate the communication of human thought and to carry out one of its great tasks.

Unesco information material

The following information materials concerning two of Unesco's major projects have recently been published and are available from Unesco, Paris.

La Escuela y el Progreso de America Latina, a 16-page illustrated pamphlet describing the organization of the current Latin American project for extension of primary education and related activities. Spanish only.

Re-birth of a Continent, single wall sheet, with photos and captions, illustrating aspects of the major project in Latin America. English, French, Spanish and blank editions (to permit overprinting in other languages).

East & West—Towards Mutual Understanding ? by Georges Fradier, a 49-page illustrated brochure outlining some of the historical links between the Orient and Occident, with a summary of the major project's role in re-establishing closer relationships. English and French. (A Spanish edition is in preparation.)

East and West Do Meet, a display set of 21 photos illustrating the basic similarities, despite surface differences, between various facets of life in the Orient and Occident. An accompanying discussion guide for use by teachers and group leaders is available in English, French and Spanish.

Manual on the small public library

A manual on *The Small Public Library Building* has recently appeared as the tenth in the series of *Unesco Public Library Manuals*. Its purpose is to help in the planning of small public libraries throughout the world and, in parti-

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1. The address of the ICFT for the time being is Unesco, Paris, France.

cular, in underdeveloped regions where library construction is still in its initial stages.

The co-authors, Mr. Hoyt R. Galvin, Director of Libraries, Public Library of Charlotte and Mecklenburg County, Charlotte, N.C., U.S.A., and Mr. Martin Van Buren, of the same city, architect and specialist in library interiors, have presented in the chapters of this book information and advice regarding various aspects of modern library planning, the layout of the different services and their functional relationship, building materials, furniture and equipment, etc.

Library implications of adult education activities are fully recognized and adequately met through provision of spacious and inviting reading rooms, easy access to reading materials and to sources of information, and flexible areas for library extension work (exhibits, concerts, discussion groups, etc.), which allow the public library to play its part fully as a social and cultural centre of the community.

African college for trade unionists opened in Uganda

A new phase in the development of African trade unions opened with the inauguration in November 1958 of the International Confederation of Free Trade Unions (ICFTU) college in Kampala, Uganda. The African Labour College, as it is to be called, has as yet no permanent quarters but the first residential four-month course started on 3 November in temporary buildings, with 37 participants from Aden, British Cameroons, Gambia, Ghana, Kenya, Mauritius, Nigeria, Northern Rhodesia, Nyasaland, Sierra Leone, Somalia, Sudan, Tanganyika and Uganda.

Financed by the ICFTU International Solidarity Fund, the college has been established as an international institution and its primary purpose is to train active trade union organizers and officials to serve both national centres and trade unions in the various fields of employment. A secondary purpose is the training of trade union teachers —those with the capacities and interest to undertake rank-and-file training programmes in the various countries. The college will also serve as a focal point for stimulating programmes of local training, and national movements will be encouraged to institute their own training programmes as quickly as possible. The centre is located near Makerere University.

Instruction will at first be given in English, but it is hoped to start courses as soon as possible in French for participants from territories where this language is spoken. The possibilities of giving courses in African languages are also being studied.

The director of the college is Sven Fockstedt, from Sweden, and his staff includes J. Odero-Jowi of Kenya, George F. McCray, a Negro trade unionist from the United States, and A. B. Lewis of the British Trade Union Congress. It is intended that Africans will be trained to take over full responsibility within two or three years. Two residential courses, each of four to five months' duration, will be arranged each year, and these will cater for a maximum of 35 participants in each course.